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A.B.M.CO.

HIGRADE
NORTHERN GROWN
SEEDS
FOR
FARM, GARDEN AND LAWN
The C·E·DE PUY Co.
PONTIAC, MICH.

SPRING

1918



Our 1918 Combination Offer

1 Packet Lemon Cucumber, finest of all for slicing.....	\$0.10
1 Packet Improved Icicle Radish, best radish grown05
1 Packet Wonderful Lettuce, largest head variety.....	.05
1 Packet Genuine Danish Ball Head Cabbage05
1 Packet Crimson Beauty Tomato, the Queen of All Tomatoes..	.15

\$0.40

All for 25 cents, postage paid.

The above assortment is well worth double the price at which it is offered. No tomato grown, proved so uniformly satisfactory last season as **Crimson Beauty**. It is truly the Queen of Tomatoes. Each of the other items in their class, is just as good. Profit is not our object in offering the assortment. We want you to try our seeds. The offer will hold good as long as supplies last.

Our Duty

To many farmers, war conditions may present difficult problems, as they do in other branches of business, but as compared with the suffering and dangers that our boys at the front must face, these troubles are nothing. Long hours of rigid military duty in mud and water, exposed to chilling winds and storms—in rat and vermin infested trenches, or possibly weeks of suffering in hospitals, to be at last discharged a partial or helpless cripple for life—these are a few of the hardships they must endure for the welfare of their country. It is not a question of profit with them. Their pay is less than that of a farmhand. They have responded to their country's call; if necessary, to give up their lives. Is it not therefore, our duty to contribute every possible assistance? Money, food, clothing, hospital supplies and munitions—all are necessary and the most important of all is food. The farmer who does his **FULL SHARE** in furnishing this, is as truly patriotic as though he shouldered a musket, even if not exposed to the same hardships and dangers.

We are all comrads in a war for democracy and it is our hope, that when peace at last dawns, that we may each and all have a place in the roll of honor.

Faithfully yours,

THE C. E. DePUY CO.

IMPORTANT NOTICE—Owing to the unusual conditions existing, we reserve the right to advance prices on any or all items quoted in this catalog without notice and cannot agree to fill orders only so far as our present supplies permit.

THE C. E. DEPUY COMPANY Field and Garden Seeds

MAXIMUM OF VALUE

CATALOGUE, 1918

MINIMUM EX PENSE

Free Postage or Express. We pay postage or express on packets, ounces, quarter pounds or pounds ordered at list prices. Customers ordering enough for freight shipments, or desiring to pay their own charges, may deduct eight cents per pound from **Prepaid List Prices**.

Our Terms are strictly cash with orders. As to our responsibility, we refer to Pontiac banks; First and Old Detroit National Bank, Detroit, and to Dun's or Bradstreet's reports.

Remittances should be by postoffice, or express money order, bank draft, check or registered letter. Remittances any other way will be at sender's risk. We will accept stamps if in good condition for sums less than \$1.00.

How to Order. Please use order sheet in catalog. Other blanks will be furnished by asking for them. Fill out blank spaces at top, write name and full address plainly. Keep a copy of your order. If wishing to write regarding any other matter than the order, please use a separate sheet.

Seeds by Parcel Post. By a recent ruling, seeds are carried at the same rate as other merchandise. Up to 8 ounces the rate is one cent for each two ounces for any distance. Over 8 ounces take pound rates. Within the local zones and up to 150 miles, the maximum weight is 50 pounds. Greater distances, the maximum weight is 20 pounds. If seeds are to be sent by mail, remittance should include postage as per schedule below. Any postoffice has a map showing zones and will furnish rates.

Seeds by Express. In certain instances express rates on small lots are lower than either mail or freight. These can be ascertained by inquiry at your express office, and charges can be paid there when shipment arrives.

Seeds by freight. Be sure to give name of your nearest freight office. If a prepaid station, freight charges must be included in remittance, when shipment will be sent with charges paid.

Bags Charged. A charge of 40 cents will be made for each new cotton seamless grain bag. These are heavy 16-ounce and hold $2\frac{1}{2}$ bushels.

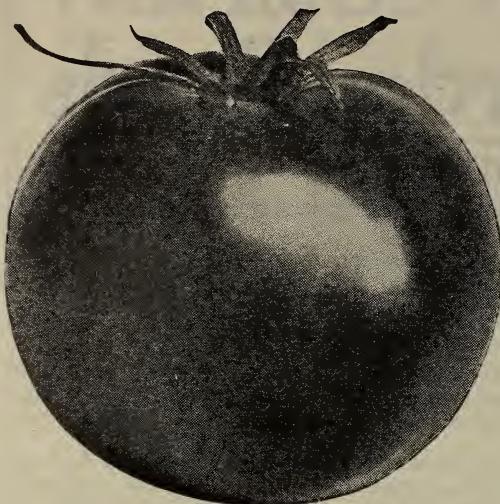
Our Gardeners Packets are a departure from the usual sealed envelope, which, when once torn open, is difficult to preserve without the seed losing out. They are put up fresh when ordered, are not torn open to get the seed out, will not leak, are always ready to use from and will be found very convenient and safe. Remember, no old, carried over packets from us.

Non-Warranty. Most of the failures with seeds are due to causes entirely beyond our control, such as unfavorable weather or soil conditions, too deep or too shallow planting, etc., which renders it impossible for us to guarantee success, and although we take all possible care to supply only such goods as will, under proper conditions, produce satisfactory results, we still give no warranty as to description, quality or productiveness of any of the seeds we send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods under these conditions, they are to be at once returned.

However, to show our confidence in the seeds we furnish, we will allow ten days in which to make germination tests, and if not found entirely satisfactory, the goods may be returned to us, when your purchase money and all transportation charges will be promptly refunded. We could not afford to make this offer if we were not sure of our quality.

THE C. E. DEPUY COMPANY

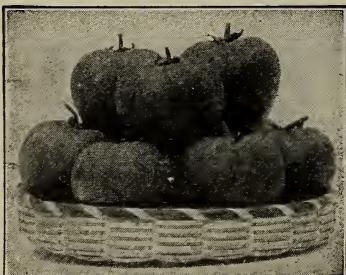
Local	Lbs.	1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47	48-49	50	
	Postage	5c	10	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Zone 1 and 2	Lbs.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Postage	5c	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Weight		1lb.	2 lbs	3 lbs	4 lbs	5 lbs	6 lbs	7 lbs	8 lbs	9 lbs	10 lbs.	11 lbs.	12 lbs.	13 lbs.	14 lbs.	15 lbs.	16 lbs.	17 lbs.	18 lbs.	19 lbs.	20 lbs.							
Zone 3	300 Miles	6c	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	
Zone 4	600 Miles	7c	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	75	79	83							
Zone 5	1000 Miles	8c	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	1.04	1.10	1.16	1.22							
Zone 6	1400 Miles	9c	17	25	33	41	49	57	65	73	81	89	97	1.05	1.13	1.21	1.29	1.37	1.45	1.53	1.61							
Zone 7	1800 Miles	11c	21	31	41	51	61	71	81	91	1.01	1.11	1.21	1.31	1.41	1.51	1.61	1.71	1.81	1.91	2.01							
Zone 8	Over 1800 Miles	12c	24	35	48	60	72	84	96	1.08	1.20	1.32	1.44	1.56	1.68	1.80	1.92	2.04	2.16	2.28	2.40							



The Crimson Beauty is certainly great. Tested it out with the most popular tomato in this section, the Earliana, and found Crimson Beauty far ahead of it. Ripens a few days earlier and never had a single fruit crack; fine shape, good size, heavy bearer, exceptional flavor and very firm until bright red. Will grow an acreage of it the coming year.—GEO. D. HILL, Benton Harbor, Mich.

I raised the Crimson Beauty tomato this year and find it a very fine flavored tomato. My wife is canning them now. I weighed five tomatoes and they weighed 3 lbs. 5 oz. That is the average. They are very smooth and average 45 to the stalk. I can say they are the earliest and best tomato I ever raised.—A. M. UNDERWOOD, Bethesda, Ohio.

I cannot praise your Crimson Beauty Tomato enough. It has more than proved a success in spite of dry weather; growing large and smooth and a most beautiful color. They cannot be beaten for size, color, flavor and yield, and can truthfully say they are a grand tomato.—FRANK G. MYERS, Columbia City, Indiana.



Potato Seed Bulbs (one-third size).
superior to all others—and more valuable than a gold mine—is fascinating in the extreme.
Order now. Secure Headquarters Stock while you can. Please show this to your friends.
PACKAGE with full directions. 15c each; 4 for 50c; 10 for \$1.00.

From the Nebraska Experiment Station.

Your Potato Seeds gave very interesting results. I had thirteen different types—white, purple, pink, etc., two to 50 in a hill. Size from half inch to three and a half inches in diameter. I look forward with interest to the growing of these tubers next year.—GEO. W. HOOD, Prof. of Horticulture.

From J. A. Smith, Palermo, Ont., Canada.

I am delighted with the big crop grown from your Potato Seed. They are much larger than I expected. One plant produced 36 fine tubers—some measuring 8 inches around. Next year they should be enormous. I thank you very much.

DePUY'S Crimson Beauty Tomato

Our earlier claims for this wonderful tomato have been more than justified, and words of highest praise are coming to us from all parts of the country. It is without question the Earliest Tomato yet Produced and astonishingly large for one so early, but better yet, it is perfectly smooth, very prolific, handsome color, solid, few seeds and possesses a delicious flavor. No tomato yet introduced combines so many good qualities as De Puy's Crimson Beauty, and until you have tried it, you can never appreciate its remarkable merits. Through wet and dry seasons it has stood the test, and today we unhesitatingly claim it to be **The Finest Tomato in Existence**. Read some of the scores of letters from growers who have tried it.

The nature of this tomato is to produce but few seeds, this with early frosts and unfavorable weather for ripening, has led to a very short supply of seeds, making it necessary to limit the amount to one ounce to any one customer. Prices, packet, 15c; $\frac{1}{4}$ oz. 50c; $\frac{1}{2}$ oz., 90c; 1 oz., \$1.50, postpaid.

I am more than satisfied with Crimson Beauty Tomatoes. They are much better than I anticipated, being earlier and of better quality than any we have ever grown. The smoothness of this tomato makes it very desirable for table use.—MRS. JNO. MURPHY, Albion, Pa.

My Crimson Beauty Tomato plants are fine, with an abundance of fruit of fine quality and size, and I would not ask for a better tomato.—CHAS. TOFTS, Stafford, N. Y.

I wish to say a few words in regard to your wonderful tomato, the Crimson Beauty. Out of 17 experiments I made this summer with tomatoes, all given the same care and treatment, I find the Crimson Beauty superior both in quality and quantity.—L. J. COPLAN, Muscatine, Iowa.

I can certainly praise your Crimson Beauty Tomato. I think it should be called the "World Beater," for I never did raise such fine tomatoes before as the Crimson Beauty.—NANCY BUCKNER, Vanceburg, Ky.

Hybridized Potato Seeds

50 NEW VARIETIES OF POTATOES

CAN EASILY BE GROWN FROM ONE PACKAGE OF OUR GENUINE HYBRIDIZED POTATO SEEDS—EVERY SEED WILL POSITIVELY BRING A DIFFERENT VARIETY.

These Rare and curious Seeds—from the Seed Balls—will produce white, yellow, pink, red, blue, purple, variegated, and black Potatoes. Often 50 to 200 in a hill. Of shapes, types, and qualities innumerable. Early and late, strange freaks, etc.

• All Valuable New POTATOES Are Produced from Just Such Seeds.

One may make your fortune. Now is your time. Give your boy a chance also to grow "Seedling" Potatoes. It is so easy. He may be the lucky one. The possibility of producing a new variety

Order now. Secure Headquarters Stock while you can. Please show this to your friends.

PACKAGE with full directions. 15c each; 4 for 50c; 10 for \$1.00.

Best Eating Potato—Immensely Productive.

I selected the earliest and best of 30 Seedlings grown from your seed, planted them alongside Early Ohio, Early Rose, and Beauty of Hebron. They are now—July 12—fully ripe, while all the others are green. Are immensely productive—the best eating potato I have. I expect to have 200 bushels.—JESSIE GREEN, La Salle Co., Ill.

50 Hills From a Single Packet of Seed.

I raised 50 hills of Seedling Potatoes from one packet of seed. Some early—some late—many kinds, colors and shapes; 94 potatoes in one hill—one measured 7 inches around.—MARY SKINNER, Grant Co., Ohio.

Spanish Jumbo Pepper

Peppers are coming into more general use every year, and their value more appreciated. The many forms in which they are served as relishes or special dishes make them a most useful addition to the table. They are easily cultivated and should be grown in every garden.

Our Spanish Jumbo is in many respects the finest pepper ever grown; exceedingly mild in flavor, mammoth in size, beautiful crimson color when ripe, thick flesh, tender and remarkably productive. Can be grown successfully wherever any other garden plant succeeds and should have a place in every home or market garden. Price, packet, 10c; $\frac{1}{2}$ oz., 35c; 1 oz., 50c, postpaid.

Little Giant Pop Corn

Pop Corn is coming into almost universal use and the demand increasing every year. Our Little Giant is an improved strain of the Dwarf Rice variety, sometimes called Australian

Hulless. It is the most prolific of all the pop corns; ears small but several to the stalk. When popped it is very tender and crisp, being practically free from the brown hull common to other varieties, and altogether it is the most delicious pop corn you have ever eaten.

The demand for this variety is always greater than the supply. Your grocer or local pop corn man will buy it of you at fancy prices. A small patch will bring the children or wife a handsome revenue, besides providing the family many a pleasant diversion during the long, cold, winter evenings. A part of every garden should be devoted to this most profitable crop. Large packets, 10c, postpaid. 1 lb., 30c, postpaid; 5 lbs., \$1.00, not prepaid.

I cultivated your Crimson Beauty Tomato this season for the first time, and am frank to say I am delighted with it. It is undoubtedly the finest early tomato I have ever seen. It is a heavy producer, fruit large, smooth, excellent quality and ranks among the earliest.—N. C. McDougle, Hockingport, Ohio.

Though we have grown many other tomatoes, we never had any to beat Crimson Beauty. They grew very large, tender and sweet. I could not write anything that would be too good in praising them.—Mrs. ANNIE WHITE, Mist, Ark.

Our Garden Seed business showing as it does, a growth of over 400 per cent in two years, must be accepted as proof that our efforts to serve our customers faithfully have been appreciated.

Improved Icicle Radish

An improved strain of this well-known variety and generally conceded the best radish ever grown. It is pure white, very attractive, full as early as some of the turnip rooted sorts. Roots grow 5 to 6 inches long, one-half to five-eighths inch thick; very crisp and tender, mild and delicious flavor, remaining in this condition until full grown. Tops short which admits of close planting. By planting every ten days, a long succession of crops may be secured. We unhesitatingly recommend this radish, especially for the home garden. Pkts., 5c; 1 oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 90c, postpaid.

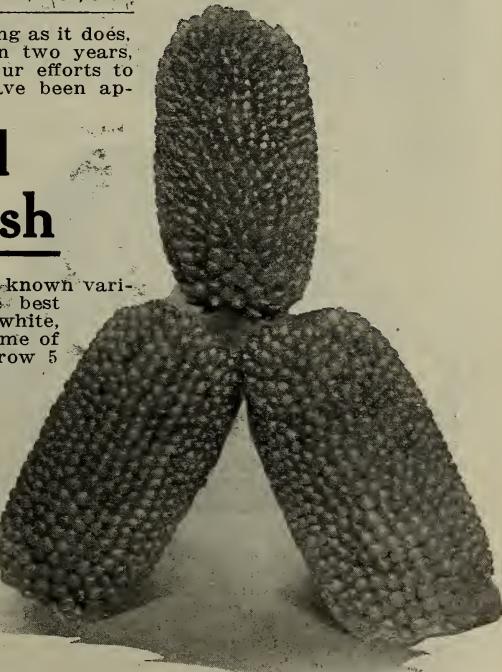
Your Crimson Beauty Tomatoes are very fine. Smooth, solid meat and of excellent flavor.—Mrs. R. L. WESSELMAN, Brookville, Ky.



Spanish Jumbo Pepper.



Icicle Radish.



Little Giant Pop Corn.

PROOF THAT Crimson Beauty IS QUEEN OF Tomatoes

Your Crimson Beauty Tomato turned out to be a very fine and delicious tomato. They are perfect in shape, also a rapid growing tomato. The vines are full and promise a large crop.—GERALD BROWN, Blissfield, Mich.

Your Crimson Beauty Tomatoes are very fine. Smooth, solid meat and of excellent flavor.—MRS. R. L. WES-SELMAN, Brookville, Ky.

I will say in regards to your Crimson Beauty Tomato, that they are the finest we ever raised. Plants stood 81 inches high. We hope to plant all Crimson Beauty next year.—MRS. CURTIS C. HAINES, Manchester, Tenn.

I tried your Crimson Beauty Tomato this season and will say that I never grew finer tomatoes than these, also, that they are one of the earliest and best bearing varieties that I have ever grown.—MRS. W. B. WOMACK, Oldtown, Kentucky.

I planted some of your Crimson Beauty Tomato seeds in a box the latter part of January, and when the plants were two inches high, transplanted to another box to give them more room. In March I set the plants out doors where they grew sturdy rapidly and were ready for the field sooner than many of the hot bed plants. In the field they made a wonderful growth in a short time. They began to ripen about June 30th and are still bearing, (Sept. 18th). The fruit is of an exceptional firmness and beauty and the plants unexcelled producers. I can gladly recommend this tomato.—NINA GWARTNEY, Leavenworth, Kans.

The Crimson Beauty Tomatoes are very nice and bear awful well.—JAS. CATTOT, Stone Creek, Ohio.

In regard to Crimson Beauty Tomato; I wish to call this tomato "Garden's Pride," for they are certainly as fine a tomato as I ever raised. They are large, smooth red skin, with solid meat and fine flavor.—MRS. JAY PENNELL, Owasco, N. Y.

I surely am glad to say something about that beautiful Crimson Beauty Tomato. I think they are just fine; they are so even in size and so smooth. I don't think they can be beat.—MRS. SINA MORRIS, New Martinsville, W. Va.

The Crimson Beauty Tomatoes are very fine. The season has been very unfavorable but they are smooth and of excellent flavor.—FRED W. CLARK, Dryden, Mich.

It is with pleasure that I recommend your Crimson Beauty Tomato as one of superior quality. In spite of the hot, dusty season, my tomatoes were fine. They are uniform in size, meaty and solid. It is my intention to use Crimson Beauty seed hereafter.—MRS. DR. M. CARTER, Burlington Junction, Mo.

I planted your Crimson Beauty Tomato last spring and they are very fine for this year; was so hot and dry, but they stood the heat all right.—MRS. MAE PIERCE, Allegan, Mich.

I find in your Crimson Beauty the best early tomato I ever raised; early as the Earliana and more solid; stands handling the best of any early tomato I ever raised. I recommend it to all gardeners; they cannot make a mistake in Crimson Beauty.—B. W. REESER, Royal Center, Ind.

I tried your Crimson Beauty Tomato last spring, and will say I think they are the best tomato I ever raised; very prolific and well named, Crimson Beauty.—LUCAS L. STEVENSON, Greenville, Pa.

Your Crimson Beauty Tomato is fine flavor, very smooth, good bearing beautiful color and a perfect tomato.—MRS. GEO. ALLGIRE, Camden, Mich.

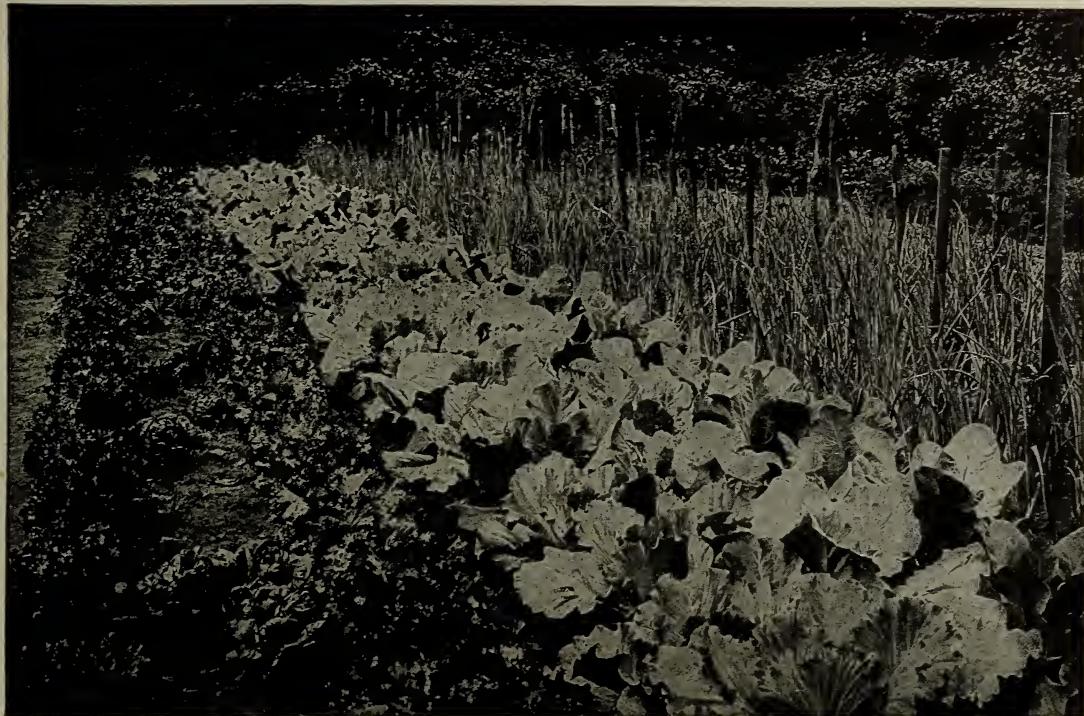
Why We Say—"Order Early"

We speak from a full knowledge of the real situation, when we say—Order Your Seeds Early.

It is well known that we have had three years of light seed crops in succession. The European War caused some shortage of supplies even in 1914, and since then the situation has grown rapidly worse, until it is now impossible to obtain many kinds from even neutral countries, with none at all coming from central Europe and practically none from England or France. All of the warring countries have heretofore furnished this country with certain supplies. It must therefore be plain that we are facing a serious situation. Many seeds will be exhausted this season before planting time. Transportation service is sure to be more or less slow. There are other reasons why we repeat—Order Now. Don't Wait.



LEMON CUCUMBER. Grows about the size of large lemons and resembles them some in shape and color. Vines are the same as other varieties and cultivated in the same manner. They are very prolific and continue to bear throughout the season. The value of this cucumber is in its remarkable quality for slicing; flesh very thick with extremely few seeds, crisp and delicious flavor. No other variety we have ever tested equals the Lemon Cucumber for table use. We are confident a trial will lead to its continued cultivation in every instance. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.



Asparagus

Asparagus seed should be sown early in spring, on rich, light soil, in drills a foot or more apart, covering the seed an inch deep. Thin to three or four inches and keep the ground mellow and clear of weeds the first season by frequent hoeing. The next spring, transplant to a permanent bed, which should be in deep, mellow soil, made very rich by a liberal application of manure. One ounce will sow 40 feet of drill.

BONVALLET'S GIANT. This giant variety not only combines high productive power and lasting quality, but it withstands the rust, so frequently disastrous to Asparagus beds. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50, postpaid.

CONOVER'S COLOSSAL. A standard variety. Popular, productive, and of good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c, prepaid.

COLUMBIAN MAMMOTH WHITE. Produces shoots which stay white as long as fit for use without earthing up or any other artificial blanching. Nearly all seedlings will produce clear white shoots. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c, prepaid.

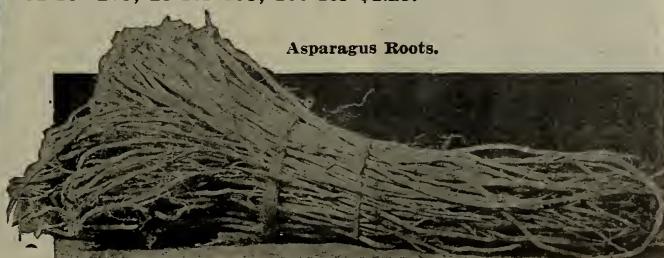
ASPARAGUS ROOTS

We recommend the purchase of roots of asparagus to those who want quick returns. The purchase of roots will save a year's time. We can supply the following varieties, strong 2-year roots:

Conover's Colossal and Columbian Mammoth White. Price, 12 for 40c; 25 for 75c; 100 for \$2.00, prepaid. Not prepaid, 12 for 25c; 25 for 40c; 100 for \$1.25.



Conover's Colossal Asparagus.



Asparagus Roots.



Golden Wax Improved.



Davis White Wax Bean.

Wax Podded Dwarf BEANS

Order Early and Avoid Disappointment.

CHALLENGE DWARF BLACK WAX. Without doubt the earliest of all the extra early beans. Vines erect, compact, bearing the pods well up from the ground. Pods medium yellow, about four inches long, curved, round, very fleshy, crisp, tender and stringless. Seed black. Best extra early wax bean for home or market garden. Large pkt., 10c; pt., 30c; qt., 55c, prepaid. Not prepaid, qt., 45c; 4 qts., \$1.60; pk., \$3.00.

CURRIE'S RUST PROOF BLACK WAX. An excellent wax bean in every respect. Rust proof, tender, thick, flat pods of very good quality. Very little string in early stages, developing a little when nearing maturity. Fit for table use 47 days from planting. Large pkts., 10c; pt., 30c; qt., 55c, prepaid. Not prepaid, qt., 45c; 4 qts., \$1.60; pk., \$3.00.

DAVIS WHITE WAX. This bean is adapted alike for the canner, market gardener, shipper or amateur. The dry bean is large, kidney shaped and white in color, making it one of the best for cooking in a dry state. Pods are long, meaty, flat in shape, and of a beautiful yellow color and fair quality. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.90; pk., \$3.65.

GRENNELL GOLDEN WAX. Vines rather more upright and harder than Golden Wax. Pods about five inches long, broad and flatter than Golden Wax. Seed similar to Improved Golden Wax. Very popular with many market gardeners. Large pkt., 10c; pint, 30c; qt., 55c, prepaid. Not prepaid, qt., 45c; 4 qts., \$1.60; pk., \$3.00.

KEENEY'S RUSTLESS WAX. One of the most vigorous growers. Vines strong and prolific. Pods produced in abundance, about five inches long, stringless, light yellow, wax-like and attractive. Very desirable for home and market gardens. Large packet, 10c; pint, 30c; qt., 55c, prepaid. Not prepaid, qt., 45c; 4 qts., \$1.60; pk., \$3.00.

PROLIFIC DWARF BLACK WAX. The old standard Black Wax Bean. It is so good that it is worthy of special notice. The pods are round, brittle, of handsome golden yellow color, and of buttery flavor when cooked. Large pkt., 10c; pt., 40c; qt., 65c, prepaid. Not prepaid, qt., 65c; 4 qts., \$2.45; pk., \$4.50.

WARDWELL'S KIDNEY WAX. One of the most desirable of the wax beans. Matures a little later than the Golden Wax; produces a large yield of long, nearly straight, broad, light golden yellow, very handsome pods. The very attractive appearance of this variety makes it extremely saleable and one of the most profitable. Large pkt., 10c; pt., 40c; qt., 75c, prepaid. Not prepaid, qt., 65c; 4 qts., \$2.40; pk., \$4.50.

GOLDEN WAX IMPROVED. Rust proof, a great improvement over the old Golden Wax. Pods four to five inches long, broad, flat, golden yellow, very fleshy, and one of the best beans to use either as a snap or shelled. Ready for picking 45 to 47 days from planting. Large pkt., 10c, postpaid. Pint, 40c; qt., 75c, prepaid. Not prepaid, qt., 65c; 4 qts., \$2.45; pk., \$4.50.



Black Valentine.

Green Podded Dwarf Beans

Order Early and Avoid Disappointment.

BURPEE'S STRINGLESS GREEN POD. This new bean produces a vine similar to Red Valentine, but develops pods to an edible condition in 42 days, about four days earlier than Valentine. The pods are green, not quite so round as Valentine and less curved. The pods are stringless, absolutely so, this quality at once placing the variety at the top of the list among table beans, while the early maturity is of great merit. This stringless quality is of particular value, the pods breaking as short and free as pipe stems. Large pkt., 10c; pt., 30c; qt., 45c, prepaid. Not prepaid, qt., 35c; 4 qts., \$1.25; pk., \$2.25.

BLACK VALENTINE. This excellent variety is a great improvement over the old standard Early Red Valentine, being one-third longer than that variety, with pods perfectly round and straight and of excellent quality. It also has the additional advantage of being suitable for both early and late planting, and is extremely hardy. It will withstand early and late frost: is an excellent shipper, a large yielder, and of handsome appearance. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, qt., 30c; 4 qts., \$1.15; pk., \$2.25.

GIANT STRINGLESS. A very hardy, stocky vine, pods long, round and green in color, of exceptionally fine quality and stringless throughout its entire growth. About a week earlier than Red Valentine and much more prolific. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, qt., 30c; 4 qts., \$1.15; pk., \$2.25.

EXTRA EARLY REFUGEE. Very much earlier than the old style Refugee, or 1,000 to 1, being fit to eat in 48 days from planting. More dwarf and compact in growth, while the pods are round, solid, tender, and of excellent quality, suitable for table use, canning or pickling. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, qt., 30c; 4 qts., \$1.15; pk., \$2.25.

REFUGEE, or 1,000 to 1. The vines large spreading, exceedingly hardy, with small, smooth leaves, very late, and bear long, cylindrical green pods of excellent quality. Highly esteemed for late planting and for use as pickles. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, qt., 30c; 4 qts., \$1.15; pk., \$2.25.

Pole Beans

KENTUCKY WONDER. Vines vigorous, climbing well and very productive, bearing its pods in large clusters; blossoms white; pods green, very long, often reaching 9 to 10 inches. Nearly round when young, and very crisp, although as they reach maturity they become irregular and spongy. Dry beans long, oval, dun-colored. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.75; pk., \$3.25.

Kentucky Wonder Pole Beans.

DUTCH CASE KNIFE. Vines moderately vigorous, climbing well, and excellent for a corn hill bean; leaves large, crumpled, and pods very long, flat, green in color, becoming creamy-white later. Beans broad, kidney shaped, flat, and white in color. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.75; pk., \$3.25.

LAZY WIFE. One of the most productive and easily gathered of the Pole Beans, hence its very discourteous name. A most excellent bean for the home garden. The pods of medium dark green color, are produced in great abundance and measure from five to six inches long. They are broad and thick; very fleshy and entirely stringless. The pods retain their rich, tender and stringless qualities until nearly ripe, and at all stages are peculiarly luscious. Sold out.

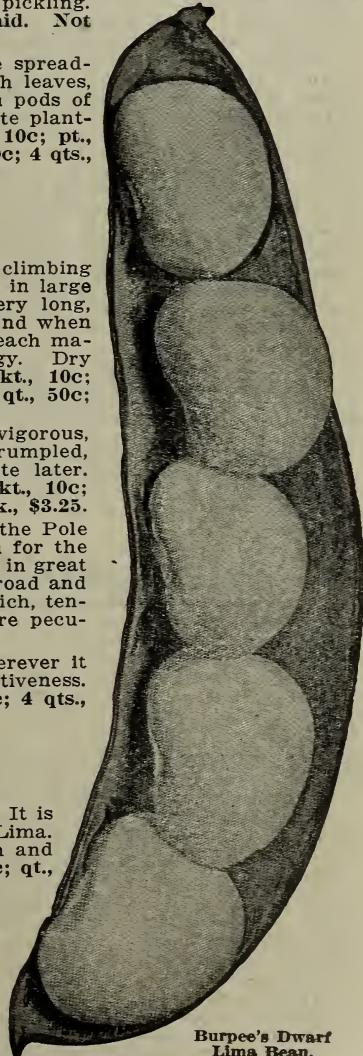
LARGE WHITE LIMA. The large Lima is a general favorite wherever it can be cultivated, on account of its excellent flavor and productiveness. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.75; pk., \$3.25.

Dwarf Lima Beans

BURPEE'S. The only bush form of the true, luscious, large lima. It is pronounced by all good judges as unquestionably the real Bush Lima. The bushes grow eighteen to twenty inches high, of stout growth and always erect. It is an immense yielder. Large pkt., 10c; pt., 45c; qt., 75c, prepaid. Not prepaid, qt., 65c; 4 qts., \$2.40; pk., \$4.50.

HENDERSON'S. This is a bush form of the small Seiva pole bean. It is the original bush form of the pole beans. It is the most productive of any, and on the whole is a vegetable of great merit. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.75; pk., \$3.25.

Short crops and complete failures in some localities have made seeds very scarce this season. Order early.



Burpee's Dwarf Lima Bean.

Beets

Order Early and Avoid Disappointment.

Owing to the disturbed conditions prevailing in Europe, where all the best Beet seed is grown, prices have advanced 100 to 200 per cent over those prevailing before the war. Our stock is from the best French growers and offered with full confidence that none better can be had.

The best results are obtained on a deep, rich, sandy loam. If wanted very early, sow such sorts as Crosby's Egyptian and Detroit Dark Red in hot beds and transplant, cutting off the outer leaves. For general crop sow in freshly prepared soil as soon as ground will permit, in rows eighteen inches apart, covering about an inch deep, and pressing the soil firmly over the seed. One ounce of seed will sow 50 feet of row; 5 to 6 lbs. for an acre.

EXTRA EARLY ECLIPSE. This is not only an extra early beet, but if sown late, it is valuable for winter use. Its rapid growth, extreme earliness, neat globe shape, with small top and bright crimson color, make this a most popular sort with growers. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

EARLY TURNIP BASSANO. Tops large; leaf stems light red; leaves light green; roots large, flesh pink, zoned with white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

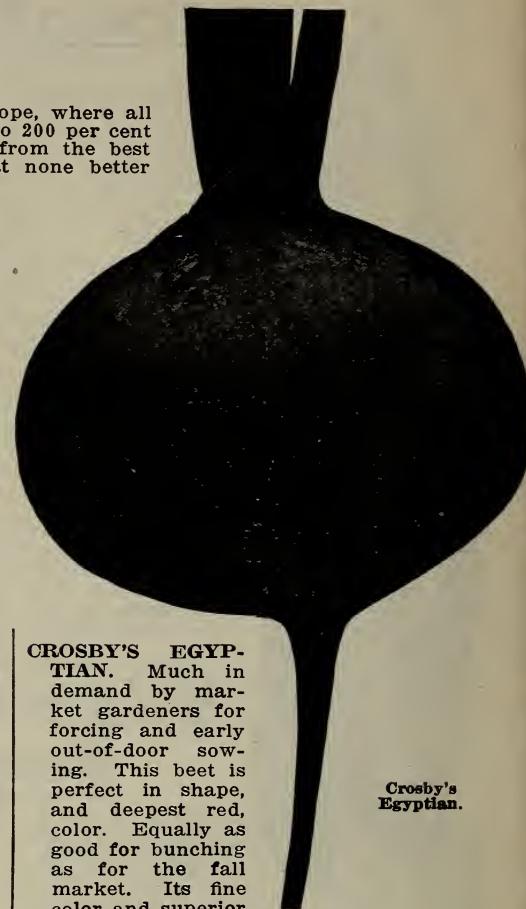
EDMAND'S EARLY BLOOD TURNIP. The best sort for general crop. In quality one of the finest, exceedingly dark, shape globular, having only one tap root. Very popular with market men. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

IMPROVED LONG DARK BLOOD. Tops large, necks small, leaf stems and vines red, leaf green, roots large, tapering, growing even with the surface. Flesh dark red, zoned with lighter shade, tender and sweet and remaining so when kept till spring. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

DETROIT DARK RED. A medium early globe-shaped beet of excellent quality. It is especially esteemed on account of its dark-red color, which extends entirely through the beet, and without the light colored rings seen in some varieties. The beets are smooth and handsome. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.45, prepaid.

Swiss Chard or Spinach Beet

SILVER LYONS SWISS CHARD. This is the finest white ribbed variety in cultivation. Leaves grow twelve to fourteen inches long. Stems and mid-ribs white, brittle and tender. These are cooked same as asparagus or pickled. A most valuable plant in any garden. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c; lb., \$2.25, prepaid.



Crosby's Egyptian.

CROSBY'S EGYP-TIAN.

Much in demand by market gardeners for forcing and early out-of-door sowing. This beet is perfect in shape, and deepest red, color. Equally as good for bunching as for the fall market. Its fine color and superior quality make this one of the best beets. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.40, prepaid.

One ounce of seed will sow 50 feet of row; 5 to 6 lbs. for an acre.

Mangel-Wurzel and Sugar Beets

MANGELS FOR STOCK.—No more profitable crop can be grown than Mangels for cattle and swine. Every farmer should have one or two acres of root crops every year. These might consist of Mangels, Carrots, Turnips and Rutabagas, but at least part should be Mangels. No other acre on the farm would return better dividends. Under proper cultivation and conditions, a yield of 40 tons per acre is not unusual, and this is equivalent in feeding value to 130 bushels of corn. These feeds help to keep stock in a healthy condition, besides affording them a variety of feed. One ounce for 50 feet of drill; 5 lbs. for an acre.

MAMMOTH LONG RED. On good soil sometimes grows eighteen inches long. Dark leaves; skin bright dark red; flesh white, with veined rings of rose pink. An excellent keeper; nutritious and milk producing. It grows to an immense size, out of the ground. Enormously productive and profitable, if grown on rich, deep soil. An excellent keeper. Has no superior and will yield more tons per acre than any other variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

GOLDEN TANKARD. A yellow-fleshed variety, highly prized by dairymen for milk-producing qualities. Sheep and other stock feed on this variety and thrive. The roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap root. Grows largely above the soil and is easily harvested.

Yields an enormous bulk on good land, and can be grown closely in rows. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

GIANT HALF-SUGAR. This unites the large size of the mangel with the greater feeding value of the sugar beet. The roots average ten to twelve inches, and the outline is that of a broad, thick wedge. The upper portion is of a soft, bright pink, shading lighter toward the bottom, where the lower portion for about one-third the length is white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

VILMORIN'S IMPROVED SUGAR. In general, the most desirable beet for the factory is the one containing the largest percentage of sugar. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

You Can Grow Bigger Crops

By Inoculating Your Seed

The principle of seed inoculation is becoming well known. Briefly, it is as follows: There are certain kinds of bacteria, called the Legume Bacteria, which grow in little nodules on the roots of plants belonging to the Botanical group called Legumes (alfalfa, clovers, peas, beans, etc.), take the valuable fertilizing element, Nitrogen, from the air, and after a chemical change, store it up in the plants.

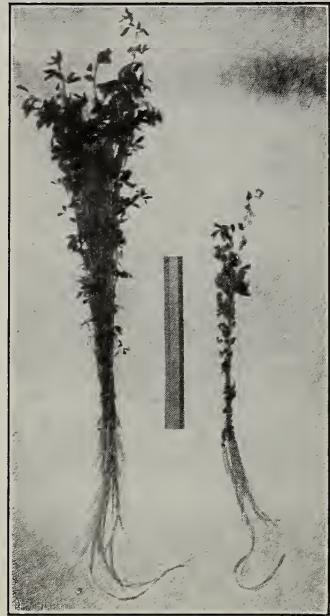
This explains why the Legumes are richer in nitrogen than other crops, and therefore of greater value either for food, or to improve the soil. *Unless the Legumes have the Legume Bacteria growing in their roots, they cannot make the most successful growth.*



Corner of a Michigan alfalfa field. Inoculated with Edwards' Legume Bacteria.

SEED INOCULATION SIMPLE

On land where it is hard to get a good catch of legumes, or on which a new crop is to be sown, the right kind of bacteria must be supplied by inoculation. *The best method of inoculation* is to treat the seed before it is sown with a pure culture of the right kind of bacteria for that particular crop. By this method, the inoculation is done in a few minutes' time, and the bacteria are carried into the soil with the seed in ample numbers to insure inoculation of the roots with consequent increased growth of the crop, and with no risk of introducing seeds of bad weeds, or germs of plant or animal diseases as is the case when the method of using inoculated soil is used.



Alfalfa plants from inoculated and uninoculated seed sown in Alberta. The experimenter who made the photograph himself wrote regarding it: The ruler is 12 inches long. The bunches of alfalfa are fair average samples from the treated and untreated plots. (Bulletin Ontario Agricultural College.)

The cultures of Edwards' Legume Bacteria are grown from the same strain as used in the above experiment.

INOCULATION NECESSARY

The pure culture method of seed inoculation is endorsed by the Federal Department of Agriculture and many of the State Experiment Stations. Seed inoculation in Virginia gave beneficial results in 82%

of the cases reported. At the Ontario Agricultural College, for a period of ten years, during which time cultures were sent out to inoculate 27,750 bushels of seed, the average of reported favorable results from inoculation was 80% for alfalfa, and 70% for red clover. The Illinois Experiment Station found on chemical analysis of cowpeas that, "The inoculated plants contained nearly four times as much nitrogen as the uninoculated plants, and about three-fourths of the total nitrogen was obtained from the air. The roots and tubercles of the inoculated plants contained six to seven times as much nitrogen as the roots of the plants not inoculated." Bulletin No. 110 of the Delaware Experiment Station says, "Inoculation is absolutely necessary for getting a stand of alfalfa in Delaware." Bulletin No. 271 of the Michigan Experiment Station says regarding inoculation, "As the expense is so little, and the risk of partial or complete loss of the crop is so great in case the bacteria are not present, artificial inoculation should by all means be used when alfalfa is being sown for the first time in a field."

FURTHER AUTHORITY FOR INOCULATION

The Farmer's Review, Chicago, issue of April 24, 1915, says in an editorial about alfalfa: "There is no magic about alfalfa. Good seed and inoculation on well drained and carefully prepared soil assures success. It has been shown time and again by practical farmers and Experiment Stations that alfalfa will do well on almost any soil if it is properly prepared, and contains enough lime to furnish the alfalfa with all it needs."

Bulletin No. 137 of the Iowa Experiment Station says about inoculation: "The co-operative experiments (by Iowa farmers) show that in practically every instance where the soil was inoculated, a more vigorous growth resulted. In many cases the difference was the difference between success and a total failure. Considering the ease and slight expense of inoculation, a farmer can ill afford to risk a loss by not inoculating."

Peter Swartz, of the Cornfalfa Farms, Waukesha, Wis., winner of the world's prize in alfalfa at the Panama Pacific Exposition, says in order to grow alfalfa successfully: "You have to have good seed,

and you can't grow good alfalfa if the right kind of bacteria are not in the soil."

We quote by permission from a letter from Prof. H. D. Hughes, professor of farm crops, Iowa State College, regarding inoculation for sweet clover. "Frank C. who has been growing alfalfa for some 15 or 16 years in Eastern Iowa had never inoculated his sweet clover seed, and did not consider it necessary until more or less recently. I visited his farm in June, 1913, and found a field of 34 acres, which, while a perfect stand, had grown to a height of only 10 or 12 inches. This sweet clover had been sown the preceding spring, and should have been five feet high. In fact, a few plants here and there were as high as my head and green and vigorous. On digging up these plants we of course found an abundance of nodules on the roots, while the other plants, which were small and yellow, showed no nodules. Needless to say, Frank C. is a thorough believer in inoculation after having had this expensive experience. And remember, he had this experience after having grown sweet clover on his farm for fourteen years without inoculation."



Portion of a well inoculated root of red clover. "Few if any plants are superior to red clover as a soil improver. Experiments have shown that from thirty to fifty per cent of the fertilizing value of red clover lies in the roots and stubble that are plowed under, even when the hay crop is removed; and this, together with a large amount of vegetable matter, rapidly increases the productive powers of the soil. Yields of grain are often increased as much as ten bushels an acre by turning under a clover sod."

EFFECT OF INOCULATION ON SUCCEEDING CROPS

Another valuable result of inoculation is that the roots of a well inoculated crop will contain more nitrogen than those of a crop not inoculated, hence they would be of much greater benefit when such a field was plowed for a succeeding crop. Still another point is that in case of a crop like alfalfa or clover, well inoculated plants, being more vigorous, do not winter kill as easily as plants from uninoculated seed.

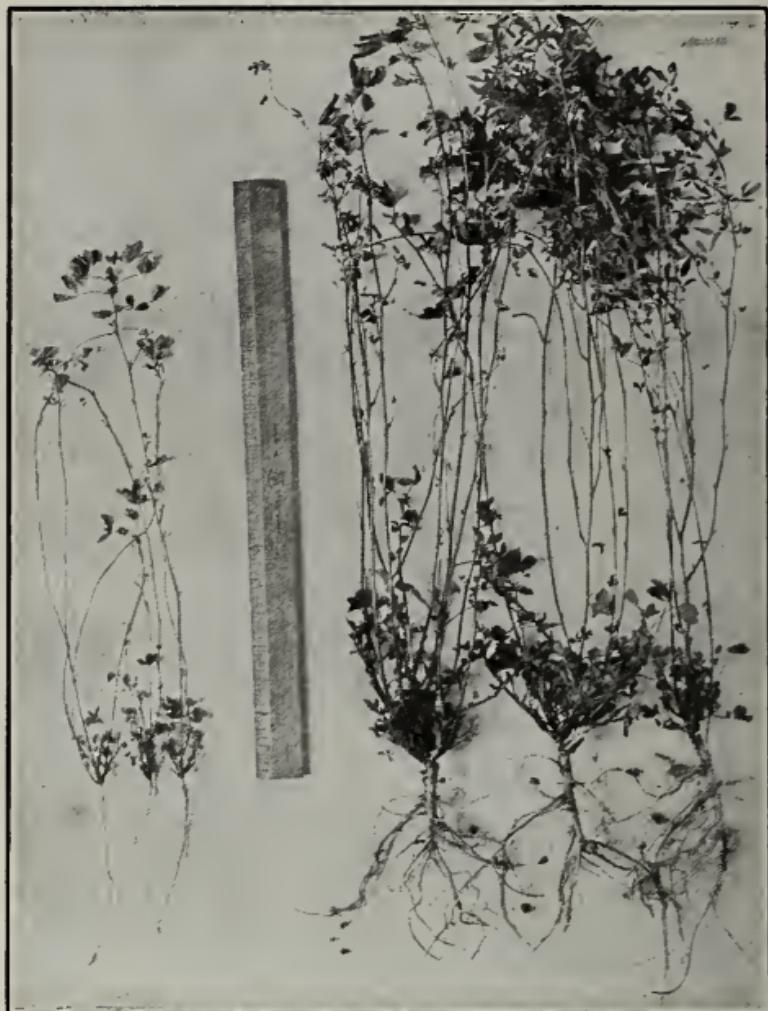
RELIABILITY OF EDWARDS' LEGUME BACTERIA

All the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA. These cultures are manufactured by the method originated in 1905 at the Ontario Agricultural College, and successfully followed every year since at that college. They are prepared under the personal supervision of S. F. Edwards, formerly Instructor in Bacteriology at the Michigan Agricultural College, Instructor in Bacteriology in the College of Medicine at

the University of Michigan, and for nine and one-half years Professor of Bacteriology at the Ontario Agricultural College. The cultures are made according to the best principles of the science of Bacteriology, and special attention is given to keeping up the vigor and nitrogen-gathering power of the bacteria.



Inoculated alfalfa root. Note the nodules, single and in clusters.



Alfalfa plants from different portions of the same field, those on the right from seed inoculated with Edwards' Legume Bacteria, those on the left from the same kind of seed not inoculated. The ruler is 18 inches long. Notice the stocky growth, the thick, sturdy roots, and nodule clusters on the inoculated plants as compared with the weak growth of the others.

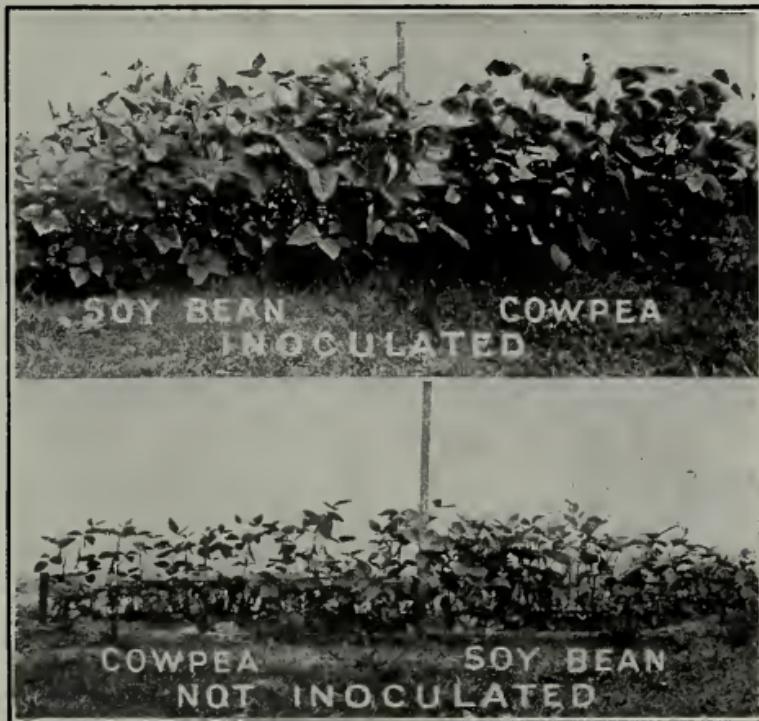
OTHERS HAVE HAD GOOD RESULTS

"I sowed ten acres to alfalfa in the spring of 1916 and did not inoculate. It was no good and I plowed it up. This year (1917) I sowed twenty acres inoculated, and it is a dandy good stand. I know it pays to inoculate."—U. D. McBain, Adams County, Iowa.

"I have examined several fields of alfalfa seeded with Cossack seed treated with your culture, and I find a good inoculation without exception. We also used your culture on soy beans and sweet peas and secured a perfect inoculation and very marked results on both."—Hugh Jeffries, Danbury, Wis.

"One year's growth is lost by not inoculating seed in this county at least."—Leslie C. Herron, Grant County, No. Dak.

"We think inoculation makes a big difference."—Bert Goodrich, VanBuren County, Mich.



Bulletin 224, Michigan Experiment Station, states—"Inoculation increased the amount of nitrogen in the soja beans almost exactly 50%. The increased amount of nitrogen returned to the soil by plowing under a crop of inoculated soja beans is amply sufficient to induce every farmer to see that his crop is inoculated if he intends to use it as a soil renovator.

"The fact that the per cent of protein is so much greater in leaves and stems of inoculated soja beans must lead to the determination to inoculate the crop if it is to be cured as hay.

"What has been said of the soja beans is true of the cowpeas."

"Where the seed was not inoculated, the alfalfa was a failure. The alfalfa was a complete success where both limed and inoculated. Liming did not help where the seed was not inoculated."—W. A. Dickinson, Floyd County, Iowa.

THE COST IS LOW

EDWARDS' LEGUME BACTERIA cultures are prepared in two sizes, to inoculate 30 and 60 pounds of seed.

To inoculate 30 pounds of seed, price \$0.60
To inoculate 60 pounds of seed, price 1.20

These prices mean a very low cost per acre, the exact amount depending upon the amount of seed sown. The cost is less than to pay freight rates on soil from a distance, or even to haul it from a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures.

HOW TO ORDER

Cultures are made for legume crops as follows: Alfalfa, Sweet Clover, Bur Clover, Red Clover, Alsike Clover, Crimson Clover, Field or Garden Beans, Velvet Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas, Peanuts. Of this list, the same cultures can be used for either Alfalfa or Sweet Clover, and likewise, the same cultures can be used for Red, Alsike, or Crimson Clovers. All the other crops require a different culture for each as named.

The entire culture may be used on less than the amount of seed for which it is prepared without harm to the seed. The cultures are good for six months after leaving the laboratory. They are sent by mail or express prepaid with full directions for use. Terms, cash with the order. Order now, then there can be no delay when you are ready to plant your seed. Write your name and address plainly, and send to the address below.

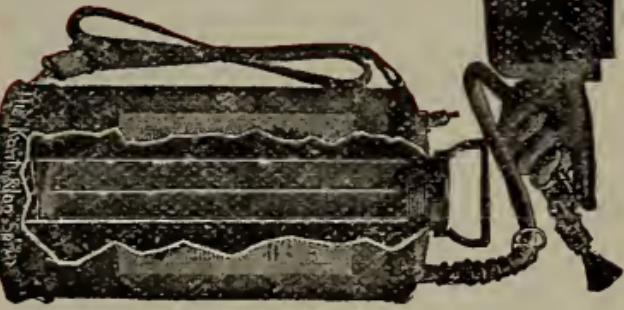
THE C. E. DePUY COMPANY
PONTIAC, MICHIGAN



Portions of alfalfa roots showing the nodules formed by the Legume Bacteria, natural size.

\$1700 Made by One Man

Selling the "Kant-Klog" Sprayer in
his home County during spare time



If you need a sprayer for your own use—or if you want to book the orders of your neighbors and friends, fill in and send this blank to address given below—we have

A Special Offer for You

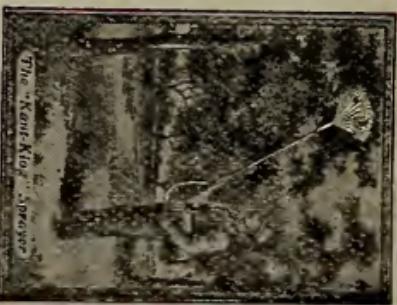
Name _____

P. O. _____

St. _____

Mail this to ROCHESTER SPRAY PUMP CO.
177 BROADWAY, ROCHESTER, N. Y.

(Over)



A Special Offer for You



To introduce the new "KANT-KLOG" Sprayer we make a very special offer to the first reliable applicant in each locality. The "KANT-KLOG" has distinct features found on no other sprayer. It is the first and only nozzle to give both flat and round sprays and solid streams. Has cleaning device for removing obstructions without stopping the spray. The new spring Hose-Cock starts or stops the spray instantly so preventing waste of fluid.

Sprays Trees, Potatoes, Vegetables, Vines, White-Washing, Disinfecting and many other uses.



Others are making hundreds of Dollars with this Machine

If you wish either to book the orders in your section, or want a sprayer for your own work, fill out the blank on opposite side and we will send special proposition, descriptive matter, etc.

Return this to

ROCHESTER SPRAY PUMP CO.
177 Broadway, ROCHESTER, N. Y.

(See other side)



THE C. E. DePUY COMPANY

High Grade Northern Grown Seeds

19 to 27 Jackson St., Pontiac, Mich.

SEE INSTRUCTIONS FOR ORDERING ON PAGE ONE OF OUR SEED ANNUAL.

REMITTANCES should be by P. O. or Express Order, Bank Draft or Registered Letter. Do not send money in letters; it is not safe. When sent as directed we will include Free Packets of Seeds to cover cost of Money Order or Draft, if order amounts to \$1.00 or more.

Do not Write in this space

Order No.

Filled by

Checked by _____

Your Name

Post Office Date

County _____ State _____

Amount Enclosed

P. Box No. _____ R. F. D. No. _____

**P. O. or Express
Order - - - \$**

How to be Sent if by Express

Draft - - - - \$.....

or Freight, name office.....

Cash Receipts

If no Freight Agent at your Station, send Extra Money to pay Freight Charges.

Table 3

WE GIVE NO WARRANTY, expressed or implied, as to purity, description, quality, productiveness, or any other matter of any seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

SEE OUR TEN DAY GERMINATION TRIAL OFFER. PAGE ONE SEED ANNUAL.

EXTRA ORDER SHEETS AND RETURN ENVELOPES FURNISHED ON REQUEST.

Please give us the names and addresses of a few of your friends who are interested in Good Seeds, and greatly oblige.

Broccoli

One ounce will produce about 2,900 plants. Start your early crop in hotbed or in the house middle of February, covering the seed about one-half inch. Transplant to cold frame as soon as plants are large enough. Set them three to four inches apart. Remove glass part of each day, weather permitting to harden the young plants, and set permanently in open as soon as danger of frost is past. For general crop sow in open ground early in June in hills three feet apart. Insects are quite troublesome to plants grown in open ground. Therefore after sowing the seed, sprinkle a small quantity of tobacco dust over the seed and keep young plants free from insects.

EARLY WHITE FRENCH. The best and most satisfactory variety. Plants very hardy, vigorous and easily grown. Heads white, compact, hard and of good quality. Pkt., 10c; oz., 30c, postpaid. Lb., \$4.00, not prepaid.

Brussels Sprouts

One ounce of seed will grow from 1,500 to 2,000 plants. The culture is same as for Broccoli. Brussels Sprouts (see picture) is a delicious vegetable, producing miniature heads from each side of the center stalk. These heads are a great delicacy boiled in the same way as cauliflower. Sow the seed middle of May in seed bed, transplant and cultivate same as cabbage. Crop is hardy and improved by frosts. One plant will yield from 1 to 2 quarts of heads.

IMPROVED BRUSSELS SPROUTS. Dwarf. Of very early and dwarf habit, covered closely with miniature cabbages. Delicate and toothsome. Pkt., 10c; oz., 30c, postpaid. Lb., \$4.00, not prepaid.

Cauliflower

For earliest Cauliflower, plant seeds in greenhouse or boxes in the house during January or February. Transplant to flats or cold frames 2 to 3 inches apart. Set in open ground as soon in spring as land can be prepared. Soil should be well supplied with humus and moisture. For late Cauliflower to mature during pickling season, start plants in open ground like late cabbage and handle same as that crop. Tie the leaves over the heads to protect them from the sun.

The seed we offer is our own direct importation from the most celebrated grower in Denmark. It is the best the world affords and we call particular attention to our very reasonable prices.

EXTRA EARLY DWARF SNOWBALL. The earliest of all cauliflower; our strain representing the highest results yet attained in the culture of this most valuable plant. Especially adapted for forcing or wintering over for early crop. In size, compactness and color it represents quality of the highest type. Heads frequently reach 9 or 10 inches in diameter, with depth in proportion. The



Brussels Sprouts.

plant is compact, with few short leaves and well suited for close planting. Pkt., 15c; $\frac{1}{4}$ oz., 60c; oz., \$2.00; $\frac{1}{4}$ lb., \$7.00, postpaid.

EXTRA EARLY DWARF ERFURT. A thoroughbred strain of a remarkably sure heading early variety. Is of dwarf habit, with short outside leaves, but not as early as the Early Snowball. Heads of medium to large size, curd white, very deep and of finest quality. This is one of the most valuable sorts for both home and garden. Regardless of price, there is positively no better seed grown than we are offering. Pkt., 15c; $\frac{1}{4}$ oz., 50c; oz., \$1.75; $\frac{1}{4}$ lb., \$6.00, postpaid.

DRY WEATHER or DANISH GIANT. The grower had but a limited amount of what he termed "extra select" seed that he offered at an extra price and our stock is from this lot. This new variety has been fully tested in America and found especially desirable and particularly so in dry situations and seasons. Is a very sure header and a great drought resister. Heads large, solid, pure white and second early. Like all other cauliflower, it requires manure and culture, but will succeed with less rainfall than any other sort. A part of all acreage should be planted to this variety. Pkt., 15c; $\frac{1}{4}$ oz., 75c; oz., \$2.50; $\frac{1}{4}$ lb., \$9.00, postpaid.

AUTUMN GIANT. A valuable late variety with long stems, succeeding best in Southern localities. Heads are very large, white, firm and compact. Plant should be started and transplanted early to insure full development. Pkt., 5c; $\frac{1}{4}$ oz., 15c; oz., \$1.00; $\frac{1}{4}$ lb., \$3.75, postpaid.



Early Snowball.

Cabbage

The Importance of Good Cabbage Seed. Cabbage growers realize that of all the seeds used, cabbage is the last one they can afford to take chances on, and there is probably no other seed in the list with such a variety of quality on the market as of cabbage. With the exception of the Danish types, our seed is grown on Long Island where it has been proven conditions are better suited than any other part of the country. Long Island seed commands a premium and for this reason many seedsmen handle the cheaper grades grown in Europe. No other costs more, and very little of it as much, as that we offer, yet our prices are no higher than others ask for European seed.

The best Danish types are grown in Denmark and every pound we handle is from the best grower in that country.

All that Cabbage requires is the soil to be rich, deep, well-drained, and abundantly manured. For the early kinds, plant 30 inches between the rows and 16 inches between the plants. For the late kinds, three feet between the rows and two feet between the plants. For very early use, sow in January or February, in hotbeds. Set out when the plants are strong enough in other hotbeds, or set in cold frames in March. Transplant when danger of frost is past to the open ground. An ounce of seed produces 1,500 plants; one-half pound to transplant for an acre.

How to Destroy Cabbage Worms. Slug shot can be used lightly or heavily and the cabbage suffers no harm. The cabbage forms its heads by the interior growth; it throws off its earlier and outer leaves, and no dust can enfold within its head. Apply Slug Shot with a duster, seiving it over the plants or full-grown cabbages. The powder is very fine and goes a long way in field or garden. **Not prepaid, 5-lb. pkg., 35c; 10 lbs., 65c; Tin Duster, each, 35c.**

Our stock is grown by a firm who have made a specialty of cabbage seed since 1828, and who are, without doubt, the best cabbage specialists in the world. Their seed stood first in a field of 25 contestants, as to the number of tons produced per acre, in a three-year test made by the Pennsylvania State College Experimental Station, 1909-11, their nearest competitor being about two tons per acre behind them. There is no seed superior and little equal to what we offer.

Extra Early Varieties

EXTRA EARLY EXPRESS. The earliest cabbage known. Heads small, solid, less pointed than the Jersey Wakefield. May be planted close together. Our seed is an extra choice strain. **Pkt., 5c; oz., 20c; 1/4 lb., 75c; lb., \$2.50, prepaid.**

TRUE JERSEY WAKEFIELD. A standard variety for early market or home use. This popular cabbage has almost superseded the Early York and Ox Heart, so popular years ago. Heads very solid, stalk short, foliage dark green. **Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

EARLY LARGE WAKEFIELD. An improved strain of the Early Jersey Wakefield and possessing many of the characteristics though larger and several days later. An excellent sort. **Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

CHARLESTON WAKEFIELD. This is a sport of the Jersey Wakefield. Heads much larger and less pointed than the original. Owing to the great popularity of this cabbage among truckers of the South, especially around Charleston, S. C., it was named Charleston Wakefield. **Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, prepaid.**



Danish Round Head.

COPENHAGEN MARKET. The earliest large round-headed cabbage yet produced. Exceptionally large for so early a variety, short stem, few outer leaves. A most excellent sort for home and market garden. **Pkt., 10c; oz., 40c; 1/4 lb., \$1.20; lb., \$4.00, prepaid.**

Medium Early Varieties

EARLY DANISH ROUND HEAD. This new cabbage is very heavy and solid, like the "Ball-head" type of cabbage; makes a fine, large, globe-shaped head with well-developed outside leaves, but is very much earlier in maturing than any of the Danish cabbages, in fact, as early as Early Jersey Wakefield, and will give a much heavier yield per acre than that variety. It is short-stemmed, the heads being produced almost on the ground. The leaves are tightly folded around each other, which permits close setting of the plants. The heads mature all at the same time. **Pkt., 5c; oz., 20c; 1/4 lb., 75c; lb., \$2.75, prepaid.**

ALLHEAD. Without doubt the finest of the second early cabbages. A good keeper and one of the surest croppers. Heads large, flat but deep, uniform in size. Desirable for kraut. By late planting can be used as winter cabbage. **Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

EARLY WINNINGSTADT. A very popular variety heads pointed, solid, fine grain, tender and good size. Can be planted early or late and make a good winter cabbage. **Pkt., 5c; oz., 15c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

ALL SEASONS. One of the largest and most desirable of the second early sorts. Plant vigorous, sure heading. Head large, somewhat flattened, nearly round, solid and best quality. Good for early summer and autumn use and regarded as one of the most desirable for kraut. **Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

Late Varieties

PREMIUM LATE FLAT DUTCH. The best known and most popular of all the late flat Dutch strains. Heads large, thick and solid. Short stalk, foliage dark green with reddish tinge. The best of keepers. Has no useless outer leaves and grows low with short stem. It cuts white and crisp, the flavor is excellent, with no stringiness. **Pkt., 5c; oz., 15c; 1/4 lb., 60c; lb., \$2.00, prepaid.**

CABBAGE, LATE VARIETIES—Continued.

DANISH BALL HEAD CABBAGE. For a winter cabbage for early spring sales some of our local gardeners consider this variety excellent. It has been selected and perfected for more than fifty years by Danish gardeners, who prize it highly and grow it almost exclusively for winter cabbage, and annually export large quantities. It is a hard heading, long keeping cabbage. Heads round as a ball, solid, fine grained, has few outer leaves, tender, crisp and of excellent flavor. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.50, prepaid.

BURPEE'S SUREHEAD CABBAGE. This famous cabbage was first introduced 40 years ago (1877). It produces large, round, flat head of the Flat Dutch type, and is remarkable for its certainty to head. It is all head and always sure to head. The heads are remarkably uniform, extremely hard, fine in texture, and ordinarily weigh from 10 to 15 lbs. each. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, prepaid.

BRILL'S WONDERFUL RED. An improved strain of Red Drumhead. Heads large, round and thick. Very dark red throughout. Considered the finest strain of red cabbage yet introduced. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.50, prepaid.

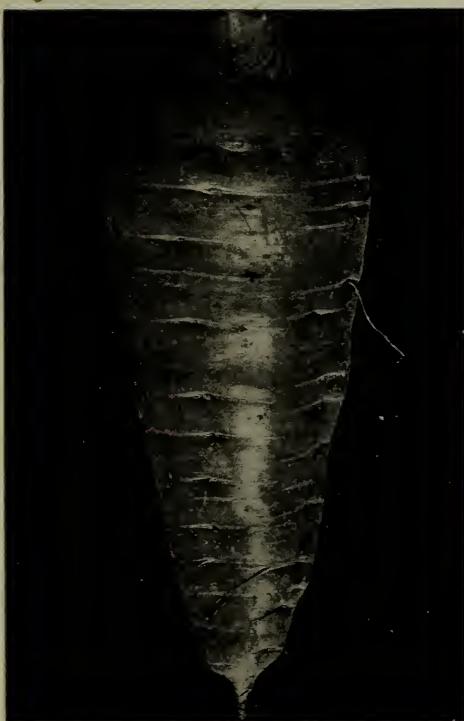


Danish Ballhead.

Carrots for Market or Home Garden

This is a vegetable deserving to be more generally cultivated, both for use upon the table and for stock feeding purposes. There is no more healthful crop root. For early, sow in spring as soon as ground can be worked, in drills 15 inches apart. For main crop, sow from the middle of May to the first of July. Hoe often and deeply between the rows. Light, sandy loam, richly manured, is the best soil. It is necessary to sow carrots quite thickly on account of the young plants not having sufficient strength to come through the ground when sown thinly. Cover one-fourth to one-half inch deep and see to it that the soil is well firmed about the seed. Do not let the weeds get a start. Thin to 5 or 6 inches apart in the row. Gather and store for winter use like beets or turnips. One ounce will sow about 125 feet of drill.

LONG ORANGE. The most popular of the older sorts for farm use on mellow soil. An improvement obtained by years of careful selection of the best formed and deepest colored roots. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.



Chantenay.

GUERANDE, or OXHEART. Tops small for the size of the roots, which are comparatively short but often reach a diameter of five inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young excellent for table use, and when matured equally good for stock. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

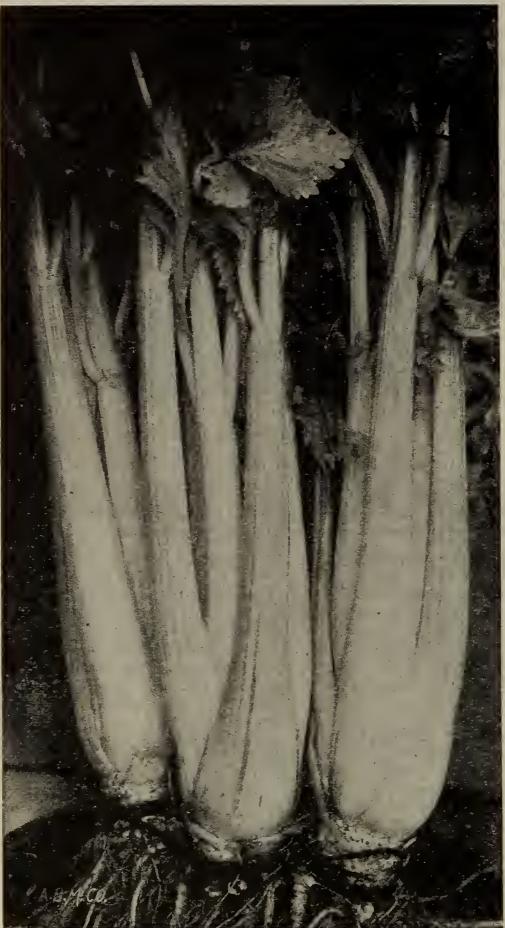
CHATENAY. Tops medium sized; necks small; roots tapering slightly but uniformly stump-rooted and smooth; color deep orange-red; flesh very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any, is a heavy cropper and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

DANVERS HALF LONG. Grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size, coarsely divided. The smooth, handsome roots are deep orange, of medium length, tapering uniformly to a blunt point; flesh sweet, crisp, tender and of a deep orange color. Although the roots of this variety are short, they produce as large a bulk as the longer field sorts and are more easily harvested. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

DE PUY'S FORCING. A new variety of great merit. It is the earliest and sweetest carrot grown, making it especially valuable for the home or market garden. This splendid carrot is similar in shape to the Danvers Half Long, coreless, and the flesh of fine texture and bright orange color. While of vigorous growth and productive as a root crop, it is a shy seeder and the supply of seed is limited. We earnestly recommend a trial of this magnificent variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, prepaid.

Stock Carrot

WHITE BELGIAN. There are other stock carrots, but none approaching this variety for yield, keeping qualities and feeding value. It attains a length of 12 inches, growing about one-fourth to one-third above ground, making it easy to gather. It is a great favorite with stock feeders and should be grown more extensively. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.



Golden Self-blanching Celery.

"The Crimson Beauty Tomatoes are doing fine for the dry weather. We are canning from them now. I like them just fine and am going to keep in the seed. They have the finest flavor of any Tomato I ever ate."—MRS. WM. SHIELDS, Lewis, Ind.

"On account of bad drought our tomatoes are all late, but we now have some fine large Crimson Beauty which for size and smoothness are ahead of all others and we have six varieties."—P. R. KIMMEL, Canfield, Ohio.

Celery

One ounce will produce about 2,500 plants and sow about 200 feet of row. Sow the last of March or early in April, in an open border, in rich, mellow ground in shallow drills, watering freely in dry weather. By rolling or pressing in the seed, the result will be more satisfactory than when only covered. Cut the tops off once or twice before planting out, to make them stocky. When the plants are 5 or 6 inches high, transplant the dwarf varieties 3 feet and the taller 4 feet between the rows; plant 6 inches apart in the rows. Cultivate well and when large enough, blanch by earthing up. The first operation is that of "handling," generally done by the beginning of September. After the soil has been drawn up with the hoe, it is drawn around each plant by the hand to keep the leaves firm in upright position and prevent spreading. When the plants have become "set" in an upright position and the celery is wanted for early use, they should be "banked." This is done by throwing the soil up as close to the plants as possible with a plow and finishing it with a spade, bringing the earth up nearly to the tops of the plants. The method employed now for protecting it is by covering the tops of the banks with water-proof felt paper.

FRENCH-GROWN GOLDEN SELF-BLANCHING.

Many seedmen handle only American-grown celery seed, though it is well known that the best seed grown is that from France, where specialists have brought it to the very highest state of perfection. This seed, however, costs several times as much as the best American seed. Our stock is from the most celebrated growers and is the best that can be obtained. Pkt., 10c; $\frac{1}{2}$ oz., 60c; oz., \$1.00, postpaid.

AMERICAN-GROWN GOLDEN SELF-BLANCHING. Our American seed is of the highest quality, grown under the supervision of one of the best specialists in the country. Pkt., 5c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.50, prepaid.

WHITE PLUME. The peculiarity of this leading variety is that the inner leaves and heart are naturally white, so that by closing the stalks, either by tying or by drawing the soil close about the plants and pressing it together with the hands, the blanching is completed. It is the earliest celery in cultivation, but will not keep longer than the holiday season. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50, prepaid.

SOUP or CUTTING CELERY. This variety is adapted for sowing thick in rows and cutting when three or four inches high, to use for soup flavoring. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, prepaid.

GIANT GOLDEN HEART. Produced by careful selection and high culture from Dwarf Golden Heart by one of the best celery growers in the country. Unequaled in quality, appearance and large size. Highly recommended for both market and home growing. Pkt., 5c; $\frac{1}{2}$ oz., 15c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, prepaid.



Long Orange Carrot (See page 11).

Corn, Sweet or Sugar

A late, wet spring, followed by a very hot, dry summer, and later, early frost has caused an extremely light crop of seed Sweet Corn, with a probable shortage before planting is finished next spring.

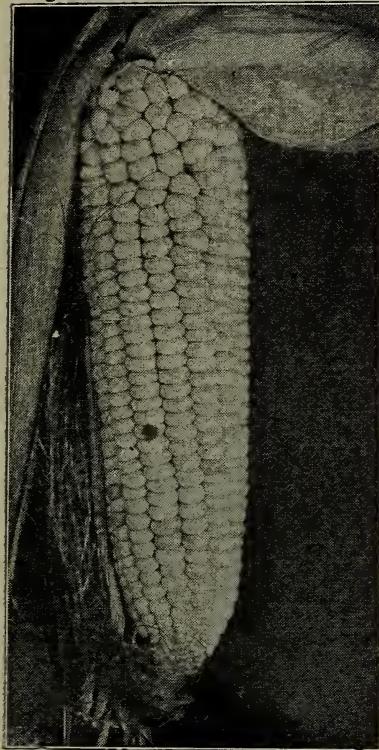
Our seed corn was grown in a Northern section favored with a very desirable season and matured better than in almost any other part of the country. It will be found much better than most of the seed this year. All varieties of Sweet Corn were the lightest crop the past season ever known. Owing to light supplies of seed, we are not offering more than 4 quarts to any one customer with orders for other seeds. Our stock is mostly 1916 crop, much better than the 1917.

GOLDEN BANTAM.

Although very early, it possesses the valuable quality of being one of the sweetest and richest. It may be planted thickly as late as July 15th. By successive planting, it may be had for table use from July 20th on. The grains are a rich, golden yellow, of fine flavor. Qt., 50c; 4 qts., \$1.75, not prepaid; Large pkt., 10c; pt., 35c; qt., 60c, prepaid.

MAMMOTH WHITE CORY.

Considering its exceptional earliness, this corn is extra large. The stalks grow about four feet high, each bearing 2 ears of good quality. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Qt., 35c; 4 qts., \$1.25, not prepaid.



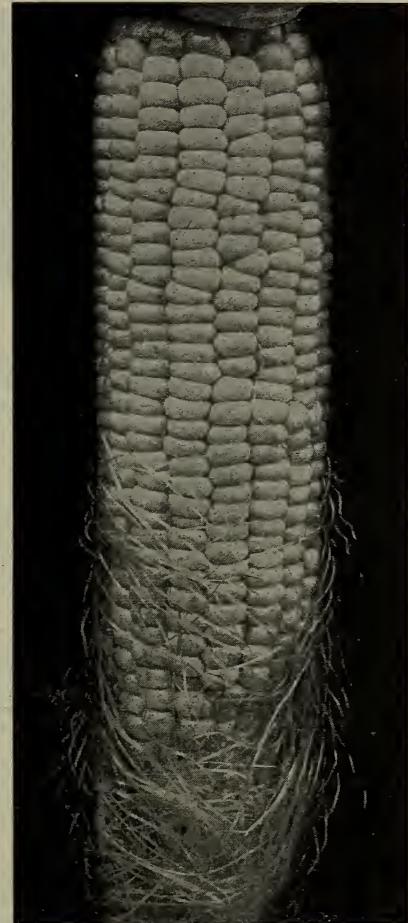
Golden Bantam.

EARLY MINNESOTA. An old favorite. While not as early as the Mammoth White Cory, it is of excellent quality, having ears 8 to 10 rowed, and very productive. The latter is the most pronounced desirable feature. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Quart, 50c; 4 qts., \$1.75, not prepaid.

BLACK MEXICAN. This corn, when in condition for the table, cooks remarkably white; but the ripe grain is black or bluish-black. It is surpassed by none in tenderness. For family use it is considered by many the most desirable of the medium late sorts. It does especially well for second early. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Quart, 50c; 4 qts., \$1.75, not prepaid.

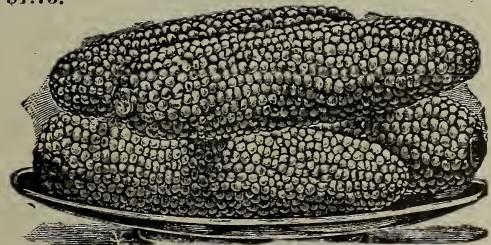
EARLY EVERGREEN. The ears of this new corn grow 8 inches long, are mostly 14 to 18 rows. This is a magnificent kind for market gardeners and for main crop in every home garden. It ripens 10 to 12 days in advance of Stowell's Evergreen and is equally as good for all purposes. The kernels are very sweet and tender, and when eaten from the cob break off free from husky tips so common in some otherwise fine table corns. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Quart, 50c; 4 qts., \$1.75, not prepaid.

STOWELL'S EVERGREEN. A favorite with canners and market gardeners for late use and especially for the kitchen garden. Ears large, kernels very deep, tender and of the most delicious sweetness; very productive. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Quart, 50c; 4 qts., \$1.75, not prepaid.



Mammoth White Cory.

COUNTRY GENTLEMAN. We have a stock of this excellent sweet corn that is exceptionally good. There is no sweet corn that compares with the Country Gentleman for sweetness. It is the variety par excellence where quality is desired. Market gardeners who make a specialty of growing for hotels and high class restaurant trade use this as a main crop variety in preference to any other. For home use it will be found superior and it is very productive. The fact that it is a favorite variety with canners proves its merit. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, qt., 50c; 4 qts., \$1.75.



Country Gentleman.



Davis Perfect Cucumber.

Select Cucumbers

Our Cucumber seed has been grown in a district that is famous for this crop, and seed saved from only the more perfect specimens. No greater care can be taken to produce select seed than has been exercised in saving the stock we offer. Cucumbers succeed best in warm, moist, rich, loamy ground. They should not be planted in the open air until there is a prospect of settled warm weather. Plant in hills about four feet apart each way. The hills should be previously prepared by mixing thoroughly with the soil in each a shovelful of well-rotted manure. Sprinkle the vines liberally with Slug Shot to protect from bugs, and when all danger from insects is past, thin out the plants, leaving three to four of the strongest to each hill.

DAVIS PERFECT. A splendid cucumber for the home garden and for the truck farmer. Possesses all the merits of the best slicing varieties, wonderfully uniform in shape and exceedingly productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.15, prepaid.

BOSTON PICKLING. This is a very productive variety that is extensively grown for pickles. The vines are vigorous. The fruits are bright green, of medium size, very smooth and symmetrical. The flesh crisp and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

CHICAGO or WESTERFIELD PICKLING. A variety esteemed and grown extensively for the large pickling establishments. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

EARLY CLUSTER. Vine vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

JERSEY PICKLE. Sixty days to make pickles. It is productive, and is said to "green" better than any other variety, and to "hold color." Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

KLONDIKE. A medium early, white spined cucumber of handsome, very dark green color and of excellent quality for slicing. The vines are very hardy and productive. The fruits when mature are about eight inches long and are uniform in size and shape. Color dark green. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

IMPROVED LONG GREEN. This is an old, well-known variety, attaining a length of about 12 inches. A favorite for sweet pickles; also desirable for slicing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.15, prepaid.

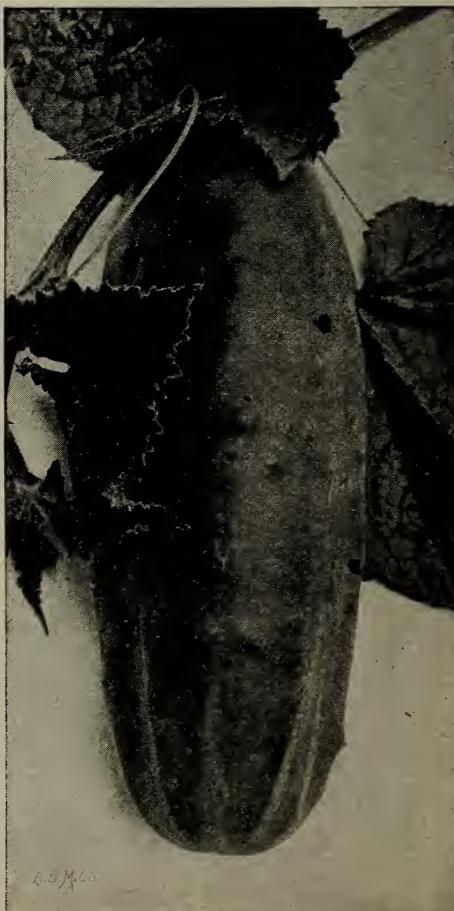
EVERGREEN WHITE SPINE. An improved strain of the well known White Spine, and a favorite with market gardeners, both for forcing and outdoor culture. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.15, prepaid.

ARLINGTON WHITE SPINE. This variety is used for forcing in frames and hothouses. Long fruits of dark green color. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

EARLY FRAME or SHORT GREEN. An excellent sort for table use and for pickling. Fruit straight, handsome, smaller at each end, bright green; flesh tender and crisp and makes fine pickles. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, prepaid.

LEMON. By all odds, the best cucumber for slicing yet produced. Size and color of a large lemon. Flesh thick, crisp and delicious flavor. Very prolific and produces throughout the season. We unhesitatingly recommend it in every garden. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c, postpaid.

One ounce of seed will plant about 50 hills; two pounds will plant an acre.



Evergreen White Spine Cucumber.

Dandelion

One of the earliest spring vegetables, much esteemed for a delicate salad. Sow seed in spring when soil is warm in rows a foot apart, one-fourth inch deep. The quality is much improved by blanching, which is easily done by covering the plants with boards. Let the plants remain over winter. Ready to cut early following spring.
FRENCH THICK-LEAVED. Pkt., 5c; oz., 25c, postpaid.

Dill

An easily cultivated plant highly prized by our grandmothers. The plant and seeds are used in pickles and soups. The seeds possess a flavor similar to caraway and used in cakes. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, prepaid.

Egg Plant

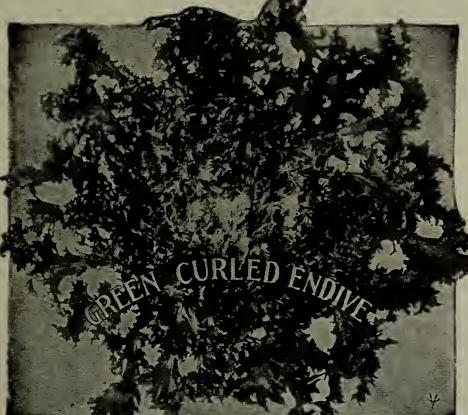
Sow in hotbed early in spring; transplant $2\frac{1}{2}$ feet apart each way after weather becomes settled and warm. If no hotbed is at hand, plants may be started in pots or boxes. The potato beetle is very fond of the plants. Paris Green, also Slug Shot, applied as to potatoes, will keep them in check. One ounce for 1,000 plants.

NEW YORK IMPROVED PURPLE. This variety is a general favorite both for market and private use. Plants large, spreading foliage light green; fruit very large, oval; color a splendid dark purple. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

BLACK BEAUTY. About the earliest of all Egg Plants. Fruit nearly as large as the Improved Purple, good size, skin dark purple, and holds its color a long time. Flesh white, fine grained and delicious. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.



Improved Purple Egg Plant.



GREEN CURL'D ENDIVE. Endive is usually grown for late fall and winter use, but is all right for any season of the year. It is very popular with the German trade and is sometimes called Winter Lettuce or "Winter Salad." Plant seed in August or September in drills about as you would Lettuce, thin out plants to ten or twelve inches apart. It is blanched for use by gathering over the center of the plants; or another way is to have a box set over each plant.

BROAD LEAVED. This is remarkable for its beauty more than quality. The best market variety, as the plant is so attractive it brings the highest price, but not as tender and coarser than the Green Curled. Pkt., 5c; oz., 15c; lb., \$1.30, prepaid.

GREEN CURL'D. One of the hardest; beautiful curled dark green leaves; blanches white and crisp; best quality. Pkt., 5c; oz., 15c; lb., \$1.25, prepaid.

Endive

Kohl-Rabi is a vegetable intermediate between a cabbage and a turnip and combines the flavor of both. The edible part is a turnip-shaped bulb, caused by a swelling of the seed. When used for the table, should be cut when small, as it is then very delicate and tender. Sow seeds in rows 18 inches apart, thinning out when large enough.

EARLY WHITE VIENNA. Very early, small, handsome white bulb. Best early variety for the table. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c, postpaid.

EARLY PURPLE VIENNA. Nearly identical with the above, except in color, which is a bright purple with the leaf stems tinged with purple. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c, postpaid.

Kohl-Rabi

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Leek

One ounce of seed to 150 feet of drill.

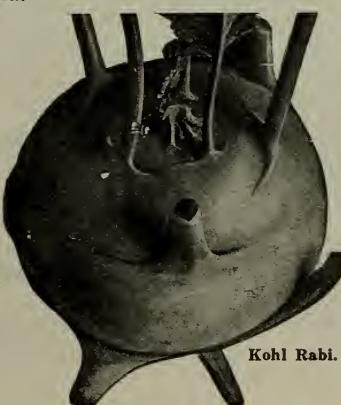
Sow the seed out-of-doors in June and thin out to four inches apart. Leek is a vegetable of unusual merit, and is not half appreciated by the American people, while it is regarded as a great favorite by many of our foreign population.

AMERICAN FLAG. This is the sort chiefly grown by market gardeners. It is of excellent quality, mild flavor and uniform. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; postpaid.

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Kohl Rabi.

Lettuce

If there is any Lettuce seed on the market produced under conditions likely to afford better crops than ours, we have not heard of it.

For early spring use sow in September and protect through the winter in cold frames the same as cabbages, or sow in hot beds in March, and transplant to open ground as soon as it can be worked. For late supplies sow in open ground as soon as season will permit, in rows one foot apart; thin out plants to one foot apart in rows. If sown every two or three weeks to the middle of August, it may be had in perfection the entire season. One ounce will sow 125 feet of drill and produce 3,000 plants.

Cabbage or Heading Varieties

BIG BOSTON. A splendid lettuce for market gardeners, either north or south. Leaves are light green, nearly smooth except the outside edges, which are somewhat ruffled. Forms large and very compact heads that are especially suitable for shipping, for which purpose it is planted very largely in the South for the northern market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.10, prepaid.

CALIFORNIA CREAM BUTTER. A variety of cabbage lettuce, with round, solid heads. Outside, the heads are of a medium green slightly marked with small brown spots; within, the leaves are of a very rich, creamy-yellow color, most refreshing in appearance; particularly rich and buttery to the taste. It is medium early and the best summer variety of head lettuce. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

HANSON. (Seed white.) One of the most desirable later summer lettuces. The plant is compact and forms a large, cabbage-like head which remains in condition longer than most heading sorts. Outer leaves bright yellowish-green, somewhat crumpled and frilled at edge and with distinctive midrib. Inner leaves white, very crisp and sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.10, prepaid.

MAY KING. Earliest of head varieties. Excellent for outdoor and for forcing. Heads compact. Inner leaves blanch to a golden yellow. Very tender and buttery. We recommend this as one of the best for both home and market gardeners. Pkt., 5c; oz., 10c, postpaid. Lb., \$1.10, not prepaid.



May King Lettuce.



Big Boston Lettuce.

DENVER MARKET. Bright green, clustering, loose, medium size head, inner leaves finely crumpled and well blanched. Desirable outdoor or forcing variety. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.50, prepaid.

NEW YORK, or WONDERFUL. (Neapolitan Cabbage.) The largest head lettuce produced. Heads 15 to 18 inches across. Blanches beautifully, crisp, tender, free from bitterness. For an outdoor, long season variety it has no rival. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.20, prepaid.

SALAMANDER. One of the most satisfactory outdoor varieties. Resists dry weather, heads large, light green, not very solid, inner leaves finely blanched. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

COS LETTUCE (Romaine). Cos Lettuce is grown extensively in Europe, but not so well known in this country as the Cabbage Lettuces. They are, however, coming rapidly into use and wherever tried are considered best of all. Leaves long, narrow, spoon-shaped, folding into loose sugar-loaf shaped heads which blanch better by having the outer leaves tied about them. Sow early in spring in rows 18 inches apart, covering $\frac{1}{2}$ inch deep. When plants have two or three leaves thin to three or four inches apart. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

Giant White Curled or Loose Leaf

BLACK SEEDED SIMPSON. One of the best for sowing outdoors where an exceedingly tender leaf is desired, and for those markets which demand a very large, loose clustering sort of a yellowish-green color. It is used also for growing under glass or in frames. Leaves ruffled and blistered and even the large outer ones are very tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

GRAND RAPIDS. Of highest merit as a forcing variety. Owing to its peculiar upright habit of growth, it economizes in bench room and in a short time produces a mass of beautiful frilled leaves of splendid quality for the table or for shipping. It is also an attractive and desirable variety for growing outside in the home garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.10, prepaid.

Muskmelon

Prepare hills 4 to 6 feet apart in a rich, moderately dry soil, thoroughly mixing therewith well rotted manure. Early in May, or when the ground has become warm, plant 10 or 12 seeds one inch deep in each hill, afterwards thinning out so that 3 or 4 plants remain. Pinch the vines when blossoming begins, to promote fruitfulness, and cultivate till the vines cover the ground. To combat insect attacks, dust with ashes, lime or road dust. Use Slug Shot for bugs and spray with Black Leaf 40 for lice.

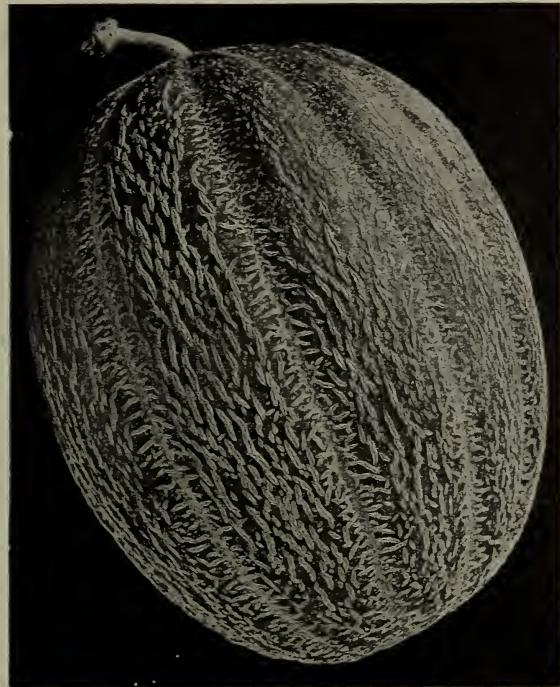
DELICIOUS GOLD LINED. This grand melon is almost round, heavily netted, the netting giving it a lace-like appearance. The thick, green flesh has a gold lining next the seed cavity, making it, when served, the most attractive melon ever grown. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50, prepaid.

Green Fleshed Varieties

BALTIMORE, or ACME. The fruits are medium sized, oval or long oval, slightly pointed at stem end, slightly ribbed, and are covered when ripe with coarse netting. The flesh is thick, green, well flavored and sweet. This variety is very productive, sure cropper, of good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

ROCKY FORD. This has become one of the most popular small or crate melons and is shipped in large quantities from Colorado and Arizona. Vines are vigorous and productive. Fruits oval, slightly ribbed, densely covered with fine netting. Flesh is green, very sweet and highly flavored. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

BANANA. This melon is delightfully fragrant; flesh salmon color and so thick that the melon is nearly solid; flavor resembling the banana, and when thoroughly ripe is very delicious. Grows 20 to 28 inches long and is very prolific. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50, prepaid.



Rocky Ford.

GREEN NUTMEG IMPROVED. An old and favorite variety. Nearly round, flesh greenish yellow, excellent flavor, hardy and good cropper. Skin dark green and nearly covered with broad shallow netting. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

HACKENSACK. Extra early. Very popular with market gardeners, as it is the earliest of the large melons. Fruit good size, round and heavily netted. Flesh green, sweet and fine flavor. One of the best as well as one of the earliest, hardest and most profitable of the netted Muskmelons. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

Orange or Salmon-Fleshed Varieties

EMERALD GEM. A very early, yellow-fleshed melon of small to medium size. One of the very best for the home garden. Vines vigorous and productive. Fruits globular or slightly flattened, somewhat irregularly ribbed and very slightly netted. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

HOODOO. A new orange fleshed variety, ideal as a shipping melon and of the very finest quality. Vines vigorous, remarkably blight resisting and very productive. Fruits uniformly of medium size. Netting exceptionally fine and dense, extending practically over the entire surface. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

MILLER'S CREAM, or OSAGE. Medium to large size, of excellent quality. Vigorous and productive. Fruits oval, dark green, slightly ribbed. Flesh salmon color, thick, fine grained, highly flavored. A favorite variety for the later market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, prepaid.

TIP TOP. Medium size, nearly round, flesh deep yellow, very rich flavor. One of the most productive and desirable for the home and market garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.



Extra Early Hackensack.

Watermelons

A light, sandy soil, with good exposure to the sun, is best for Watermelons. It should be prepared deep, but receive shallow cultivation. Hoe often and thoroughly. Plant in hills 8 to 10 feet apart each way. Plant 8 or 10 seeds in a hill, and finally, when danger of insects is past, leave but three strong plants. One ounce will plant 30 hills. What we have said about Muskmelons applies with equal force to Watermelon seed. Large quantities of cheap seed, saved from Southern fields and taken from cull melons, are marketed at very low prices. Our stock is entirely from selected melons grown strictly for seed. To destroy lice spray with Black Leaf 40.

ALABAMA SWEET. A very large, long, deep green melon. Rind thin, but very tough; flesh bright red and very sweet; seeds white. One of the best shipping melons grown. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

GEORGIA RATTLESNAKE, or GYPSY. One of the largest, most popular melons grown. Fruit long, light green, striped with a darker shade. Flesh bright scarlet, very sweet and tender. Vines large and vigorous. Seed nearly white. One of the most desirable for either home or market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

KOLB'S GEM. Very large, round or slightly oval, marked with irregular light and dark stripes. Rind hard and firm, making it one of the best shipping sorts. Flesh bright red, a little coarse but sweet and tender. Vine vigorous and productive. Seeds black. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

KLECKLEY'S SWEET, or MONTE CRISTO. Unsurpassed for home and near market. Fruit medium to large, oblong. Flesh very bright, rich red, exceedingly sweet, crisp and tender. Not a good shipper. Vine vigorous and productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

PEERLESS, or ICE CREAM. One of the best early melons. Vine moderately vigorous, hardy and productive. Fruit medium size, oval, bright green, finely veined with a darker shade. Flesh bright scarlet, crisp and very sweet. Rind thin, seeds white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c, prepaid.

SWEETHEART. Fruit one of the largest, oval, very heavy, rind thin, light green, slightly veined. Flesh bright red, firm and very tender and sweet, remains in good condition a long time after ripening. Seed black. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c, prepaid.

HALBERT'S HONEY. One of the best for local market. Fruit oblong, dark green, large. Flesh



Kleckley's Sweet.

beautiful crimson and luscious flavor. Gardeners find this a very profitable melon for local markets. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c, prepaid.

HARRIS' EARLIEST. An extra early melon of excellent quality. Fruit large for an early variety, oblong, broad stripes of light and dark green. Flesh bright red, tender and sweet. One of the best for northern latitudes. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

TOM WATSON. Fruit very large, often weighing 50 to 60 pounds, dark mottled green. Flesh brilliant scarlet, heart very large and small seed space. Rind thin, but very tough, making it a splendid shipping melon. Tom Watson is one of the best for home use and market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Citron

This melon is for preserving only. The flesh is very thick and firm and is one of the most highly esteemed fruits for preserves. Grown same as watermelon. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.



Tom Watson Watermelon.

Mustard

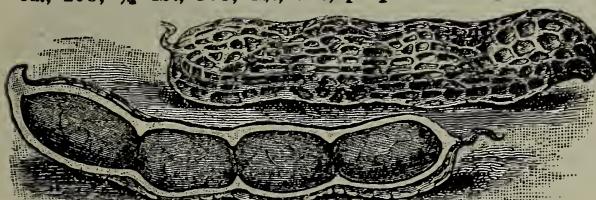
Mustard is not only used as a condiment, but the green leaves are used as a salad or cut and boiled like spinach. Sow in drills about eighteen inches apart, covering one-half inch deep. For succession, sow every few weeks till autumn. Water freely. In the South the seed should be sown in autumn and the plants used early in the spring as a salad and for greens.



Giant Southern Curled Mustard.

SOUTHERN GIANT CURLED. Extensively used in the South as a spring salad and for greens. Leaves light green; much crimped and frilled. Seed small reddish brown to nearly black. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c, prepaid.

OSTRICH PLUME. A careful study of the different types of curled mustard has convinced us there is not much difference in them; if anything, the Ostrich Plume does not grow quite as large as the Southern Giant Curled. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c, prepaid.



Mammoth Peanuts.

Virginia Peanuts

These peanuts are successfully grown in the North, producing strong, vigorous plants 18 inches high and very productive, thriving best on light, sandy soil. The crop is easily grown and one the children will take special interest in.

VIRGINIA BUSH, or CLUSTER. Pkt., 10c; pt., 25c; qt., 45c, prepaid.

VIRGINIA RUNNING. Pkt., 10c; pt., 25c; qt., 45c, prepaid.

Onions

We pride ourselves on supplying the **VERY BEST ONION SEEDS** that can be produced. The two past seasons have been very unfavorable for production of onion seed, with the result that supplies are much below normal. Yields the past season have been 25 to 75 per cent of an average, but fortunately we contracted a large acreage, so that we have a fair supply of **EXTRA FINE STOCK**, but at our very low prices expect it will be exhausted early. Our stock is 1917 crop, tests showing exceptional germination. **REGARDLESS OF PRICE, THERE IS NONE BETTER.**

The Onion is most successfully grown in a rich, sandy loam. Continued cultivation upon the same plot of ground, contrary to the general rule, rather improves the ground than otherwise. As early as the ground can be worked in the spring, sow the seed in drills 14 inches apart, covering half an inch. When the plants first appear in the rows, commence hoeing, just skimming the surface. Subsequently, weed thoroughly and carefully by hand. When the tops die, pull the onions and spread evenly over the ground; stir or turn until thoroughly dried, then cut the top off one-half inch from the bulb. Winter in a frost-proof place. One ounce for 200 feet of drill; 4 to 5 pounds for an acre.

Onion Seed is one of our specialties. We make it a study and have it grown from selected bulbs in a district that is known that world over as producing the best onion seed known. It is not to be compared with the cheap seed sold through brokers to seed houses. The supply is limited to growers' contracts, hence no old stocks carried over; its freshness and origin are known; it is the only safe kind to use.

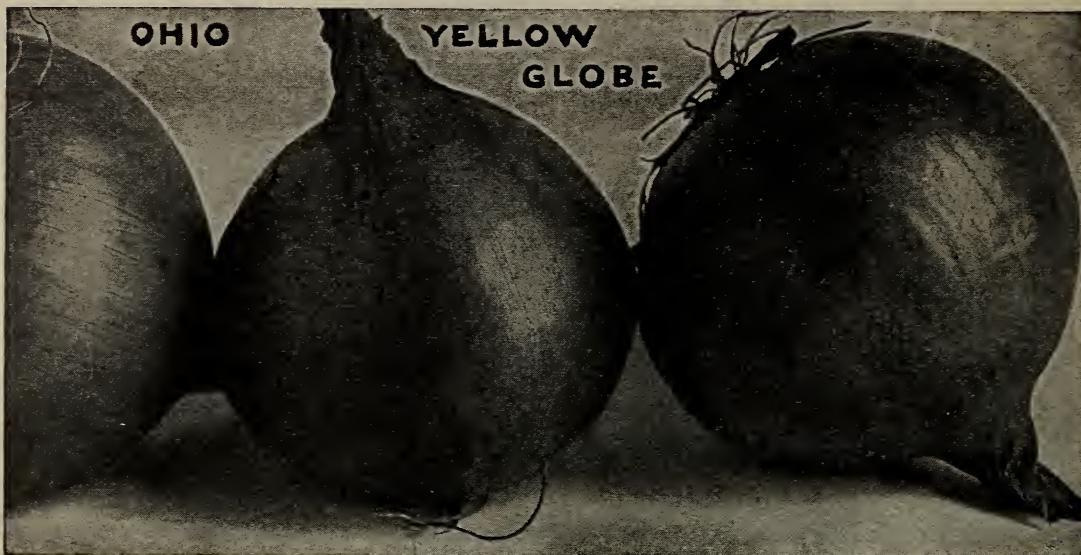


Large Red Wethersfield.

AUSTRALIAN BROWN. An extra early, medium size onion, resembling somewhat the Danvers in size and shape, skin bright yellowish brown color, flesh white and mild flavor. This is one of the surest croppers and possesses the longest keeping qualities of any onion grown, having been kept in good condition a whole year or more. One of the most desirable sorts. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$3.00, prepaid.

LARGE RED WETHERSFIELD — We have a very fine and select strain of this sort. Color is deep purplish red, flesh white, moderately grained and very firm. Yields an enormous amount per acre. The magnificent large solid onions are nearly as mild in flavor as many varieties with skin of lighter coloring. Its splendid keeping qualities make it easy to hold crops for late winter markets. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$3.00, prepaid.

EXTRA EARLY RUSSETT. Ten days to two weeks earlier than Red Wethersfield. Color russet brown, flesh very white and mild, splendid keeper, heavy yielder and a much better early onion than the Extra Early Red generally offered. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 85c; lb., \$3.00, prepaid.



ONIONS—Continued.

PRIZETAKER, or MAMMOTH YELLOW SPANISH. Grows to an immense size, and for fall marketing is unexcelled. Although of such great size, it is very hardy and a fair winter keeper, as it ripens up hard and firm; very fine grained, and of mild, delicate flavor. The outside skin is rich yellow, while the flesh is white. To get the best results from this onion, the seed is sown in beds and transplanted. It will, however, make a good crop if sown in the ordinary way. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50, prepaid.

WHITE PORTUGAL, or SILVER SKIN. The bulbs grow to good size, ripening evenly, silvery white and very mild. A favorite for bunching, and when sown thick, about 25 pounds of seed to the acre, produces the finest pickling onions and one of the best for sets that are remarkable for their keeping qualities. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00, prepaid.

YELLOW GLOBE DANVERS. This fine onion is of large size. An early and abundant cropper. Bulbs very thick, flat or slightly convex bottoms, full oval top with small neck and rich brownish-yellow skin. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75, prepaid.

MICHIGAN YELLOW GLOBE. The bulbs are large and uniformly spherical, with very small necks and the largest diameter below the center of the bulbs, of a rich orange color. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$3.00, prepaid.

OHIO YELLOW GLOBE. An early Globe Onion, small neck and very uniform in size and color. Very popular in the marsh and onion section of Ohio and Indiana. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75, prepaid.

SOUTHPORT RED GLOBE. This is a fine keeper. Large size and considered one of the best red onions. Flesh is fine grained, very mild and tender. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75, prepaid.

SOUTHPORT WHITE GLOBE. This grows to a very large size and is a perfectly globe-shaped onion. Color is a clear pure white. This variety is used by market gardeners for bunching. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

SOUTHPORT YELLOW GLOBE. A large, perfectly shaped Globe Onion and an excellent onion for keeping throughout the winter. This variety is a very heavy cropper, handsome in appearance, a good dark yellow color. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75, prepaid.

Bottom Onion Sets

These sets are grown from seed and when planted produce the earliest green onions; also large onions can be grown from them much quicker than from seed. Our sets are from choice seed grown and handled by the most approved methods. Plant as early in the spring as ground can be prepared.

	Pint	Quart
Yellow, prepaid	\$0.25 \$0.40
White, prepaid30 .50

Ask for special bushel prices.

English Multiplier Sets

The large bulbs when planted multiply and send up six to ten stalks; the small sets produce fine large bulbs. Valuable for bunching or an early crop of large bulbs. Easy to grow and productive. Pint, 25c; qt., 40c, prepaid.



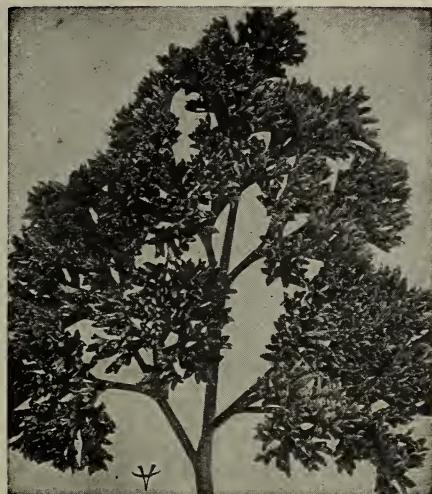
White Bottom Onion Sets.

Parsley

One ounce will sow 100 feet of drill. Requires a rich, mellow, rather deep soil. Sow early in spring in drills a foot apart and half an inch deep. Soak the seed previously to sowing in warm, not hot water, which will facilitate germination. Leave soaking for about six hours. Thin out the young plants when large enough.

CHAMPION MOSS CURLED. A most prettily curled sort. Rather dwarf, of a shiny rich green color. Very ornamental, being much used for garnishing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c, prepaid.

HAMBURG, or TURNIP ROOTED. The root is the edible portion and resembles a parsnip. Foliage very much the same as the plain. Roots can be dug late in the fall and stored in sand. Splendid for flavoring soups and stews. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c, postpaid.



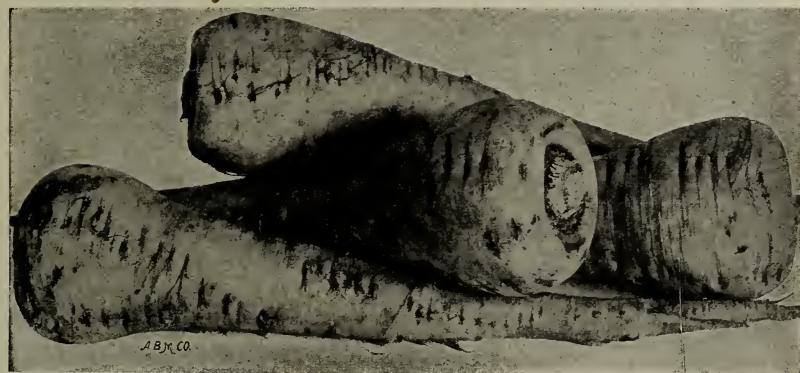
Champion Moss Curled Parsley.

Parsnips

One ounce will sow 100 feet of drill. Requires rich, well-manured soil. Sow the seed early in spring in drills 18 inches apart, covering with fine soil to the depth of half an inch. Thin out the young plants to five inches apart and cultivate well, keeping free from weeds.

HOLLOW CROWN. An old standard sort, long, sweet and very productive. One of the very best varieties for general cultivation. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 75c, prepaid.

IMP. GUERNSEY. This is a good, half-long variety, having smooth roots. It is of good quality and recommended for the family garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 75c, prepaid.



Hollow Crown Parsnips.



Large Bell or Bull Nose Pepper.

Peppers

Sow in a hot bed in April and transplant to the open ground when the weather is favorable. They should be planted in warm, mellow soil, in rows, 18 inches apart. They may also be sown in the open ground when the danger of frost is past and the soil is warm and weather settled. Thorough and frequent cultivation should be kept up until frost, by this means you can have a continuous crop.

SPANISH JUMBO. This magnificent variety is the largest, sweetest and finest flavored red pepper grown. On account of their large size and mild, sweet flavor they are especially desirable for stuffing, pepper hash, mixed pickles and other dishes in which peppers are used. Being easily grown, they should be planted in every garden. Pkt., 15c; $\frac{1}{2}$ oz., 35c; oz., 50c; $\frac{1}{4}$ lb., \$1.75, postpaid.

LARGE BELL, or BULL NOSE. A very large sort of inverted bell shape, suitable for filling or for a mixed pickle. Flesh thick, hard and less pungent than most other sorts. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25, prepaid.

CHINESE GIANT PEPPER. Without doubt one of the very best and largest Mango Pepper ever introduced. Its mammoth size, splendid shape, beautiful, rich, glossy-red flesh and mild flavor, all lead us to speak well of it. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50, prepaid.

RUBY KING. An improved American variety and one of the most popular of the large red peppers. Plant grows 2 to $2\frac{1}{2}$ feet high and very productive, ripening its large crop early and evenly. Fruits are large, with thick, mild flesh and bright red when ripe. One of the best sorts for mangoes or stuffed peppers. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50, prepaid.



Roguing a Field of Our Peas.

Northern Grown Seed Peas

Our seed Peas are true to name, grown under most careful attention and closely hand picked. None better can be furnished.

Peas mature earliest in a light, rich soil; for the general crop a moderately heavy soil is best. Commence sowing the early varieties as soon as the ground can be worked, continue for a succession every two weeks until June. It is a good plan to sow the early, second early and the late varieties at the same time for a succession. One quart for 100 feet of drill; two to three bushels for an acre. The wrinkled varieties are more susceptible to cold, wet weather than the small, round, hard sorts, hence should not be planted very early except in warm, dry locations. They are sweeter and better flavored. Our Seed Peas are grown under the supervision of one of the most expert pea men in the country, in a section best adapted to the production of the crop, and our strains are of the highest development.

Extra Early Varieties

EXTRA EARLY PEDIGREE. The earliest of all peas. Vines of medium growth, vigorous and productive. Pods large for so early a pea, containing 5 to 8 sweet, fine flavored peas. Coming as they do, 6 to 10 days earlier than Alaska, they are especially valuable to the market gardener who wants to be on the market first. They are equally desirable for the home garden. This is a grand pea and we strongly recommend them to all growers who wish to have the first and the best early pea. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.25; pk., \$2.25.

ALASKA, or EARLIEST OF ALL. Vines of medium height. Pods good size, well filled. Seed small, bluish green and good flavor. Crop matures evenly, making it a valuable variety for gardeners and canners. Very early. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.25; pk., \$2.25.

THOMAS LAXTON. A very early wrinkled variety. The pods are large, often four inches long and well filled. The green peas are very large and unsurpassed in quality. One of the very best peas yet introduced, and a favorite with market gardeners. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, pt., 25c; qt., 40c; 4 qts., \$1.60; pk., \$3.00.

AMERICAN WONDER. The earliest of the dwarf wrinkled varieties and very productive. Pods are of medium size and contain five to eight peas. Peas large, sweet, tender and fine flavored. Highly recommended. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.25; pk., \$2.25.

SUTTON'S EXCELSIOR. An early wrinkled variety. Pods large, well filled. Vines 14 to 16 inches tall. Productive. Peas large and of unsurpassed quality. One of the best for market or home garden. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, pt., 25c; qt., 45c; 4 qts., \$1.60; pk., \$3.00.

GRADUS. A very early wrinkled pea. Vines medium height. Pods very large and well filled. Peas large and splendid quality, retaining their green color after cooking. One of the very best. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 45c; 4 qts., \$1.60; pk., \$3.00.



Carter's Premium Gem.

EXTRA EARLY VARIETIES—Continued.

LITTLE MARVEL. Vines about 18 inches. Early and enormously productive. Pods filled with large wrinkled blue-green peas, of delicious flavor. This pea is taking the place of many of the older sorts and is ideal for the home garden. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pt., 15c; qt., 25c; 4 qts., 90c; pk., \$1.75.

PREMIUM GEM, CARTER'S. An improved strain and better than McLean's Little Gem. Vine 15 inches, very productive. Pods medium size, filled with 6 to 8 peas of fine quality. Peas large, green, and wrinkled. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, pt., 25c; qt., 45c; 4 qts., \$1.60; pk., \$3.00.

Second Early Varieties

THE ADMIRAL. Vines about 4 feet high, vigorous and productive. Pods medium size and crowded with 6 to 9 peas of finest quality. Peas much wrinkled, sweet and of finest flavor. One of the very best peas and a favorite with canners. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pt., 15c; qt., 25c; 4 qts., 90c; pk., \$1.75.

TELEPHONE, ALLEN'S IMPROVED. Vines tall and vigorous. The leading pea with gardeners and one of the best for home use. Pods very large and filled with large, tender, sweet peas of excellent flavor. One of the best for home and market garden. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.25; pk., \$2.25.

BLISS EVERBEARING. Vines medium height and productive. Pods medium size and if kept closely picked, vines will throw out branches bearing pods maturing in succession. Peas large, sweet, fine flavor and preferred by many to any other kind. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.20; pk., \$2.25.

Late Varieties

HORSFORD'S MARKET GARDEN. The vines of this splendid variety grow about three feet high, are hardy and very productive, bearing a larger number of pods than any other variety. Pods are of medium size and contain five to seven peas each. Peas medium size, sweet and dark green color. It is not surpassed for either home or market garden. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pt., 15c; qt., 25c; 4 qts., 90c; pk., \$1.60.

STRATAGEM. Vines medium height. Pods very large and filled with very large, dark green, wrinkled peas of finest quality. One of the best large podded varieties. Large pkt., 10c; pt., 35c; qt., 60c, prepaid. Not prepaid, pt., 25c; qt., 45c; 4 qts., \$1.60; pk., \$3.00.

BLACKEYE MARROWFAT. Vines tall, vigorous, and very prolific. Peas large, smooth, round and with a black eye. Not as sweet as the wrinkled varieties. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.20; pk., \$2.25.



Bliss Everbearing.

WHITE MARROWFAT. Vines tall and one of the most productive of garden peas. Peas large, round, smooth and excellent for summer use. Large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pt., 15c; qt., 25c; 4 qts., 90c; pk., \$1.60.

CHAMPION OF ENGLAND. Vines tall and very productive. Pods large and well filled. Peas large, wrinkled and equal in quality to any pea grown; in fact, one of the very best for home and market garden. Large pkt., 10c; pt., 30c; qt., 50c, prepaid. Not prepaid, pt., 20c; qt., 35c; 4 qts., \$1.20; pk., \$2.25.

Field Peas

We make a specialty of Canada Field Peas, which are grown extensively in Michigan, and for seed purposes are regarded as the best that are produced. As a forage crop they are being grown more extensively every year. See page 39.

Once a Customer, Always a Customer

It is our aim to furnish the best seeds that can be obtained. We make a conscientious effort to have them fresh, and in case of field seeds, to see they are well cleaned. We expect every trial order will make a permanent customer.

Pumpkin

Pumpkins are generally planted in corn, but a crop may be profitably raised in fields by themselves. One pound to 200 hills; four to six pounds for an acre.

MAMMOTH GOLDEN CASHAW. An improvement on the old light colored Cashaw. Skin yellow. Flesh yellow, fine grained, dry, and excellent for pies. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.20, prepaid.

JAPANESE PIE. A valuable new pumpkin of Japanese origin. Flesh very thick, rich salmon color, dry and sweet. Very productive and valuable for pies and cooking. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

CONNECTICUT FIELD, or LARGE YELLOW. The Pumpkin most extensively grown for stock feeding; also used for making pies. Grows to a large size. Flesh very thick, rich yellow, fine grained and highly flavored. Usually planted with corn and very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.35, prepaid.



Connecticut Field Pumpkin.

Radish



French Breakfast.

BRIGHTEST LONG SCARLET. A standard variety, excellent for home and market garden. Short top. Roots smooth, tender and very attractive. Grown extensively by market gardeners and a favorite in the home garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

CINCINNATI MARKET. Similar to the Long Scarlet, but averages longer, deeper red and remains in condition a little longer. Roots slender and often six inches long before becoming pithy. Considered one of the very best long red varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

Winter Varieties

CHINESE ROSE. Roots cylindrical or largest near the bottom. Skin smooth, bright deep rose. Flesh white, firm, crisp and pungent. Roots four to five inches long. Grown extensively for fall and winter use. Sometimes called Scarlet China. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

CHINESE WHITE, or CELESTIAL. Roots long, cylindrical, beautiful white skin and flesh. Whitest and least pungent of the winter varieties. Grows six to nine inches long and two or more inches in diameter. Flesh solid and crisp. Highly recommended for winter use. Prices, pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

LONG BLACK SPANISH. Roots long, thick, almost black and pungent. Flesh white, solid, crisp and good flavor. One of the latest and hardiest of the winter varieties. Prices, pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

Use CARCO to prevent root maggots in Radishes (see page 48).

One ounce will sow 100 feet of drill, ten pounds required for one acre. For the first crop sow as early in the spring as the ground can be worked, and every two weeks throughout the season for a succession. A warm, sandy loam, made rich and light by some good strong manure, will be most likely to make them brittle and free from worms. Sow in drills 10 to 12 inches apart. The winter varieties should be sown in July and August. Like the turnip, they make the best growth in the autumn, and must be taken up before frost, and stored away in a cool cellar, in sand, or a pit, where they will keep tender and crisp all winter. To prevent the root maggot working in radishes, we recommend planting in soil where radishes, cabbages or turnips were not grown the previous year, and the use of Carco (see page 48), which is said to be a positive preventative of root maggots. It has been used successfully on the Pacific Coast for several years, where it had become quite impossible to grow radishes for table use, until this discovery.

EARLY SCARLET GLOBE. Slightly olive shaped, bright scarlet; flesh white and tender. One of the very earliest varieties grown and highly recommended to gardeners for its size, as first forcing radish. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

SCARLET TURNIP, EARLY. One of the most attractive for its beautiful color, but little later than the Early Scarlet Globe. Roots nearly round, with white tips. Excellent for forcing. Color bright scarlet. Flesh white and brittle. A favorite with gardeners and for general culture. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

FRENCH BREAKFAST. A quick growing, olive-shaped root, beautiful bright scarlet, with white tip, small top and early. Desirable for growing under glass and for the garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, prepaid.

CRIMSON GIANT, FORCING. A round radish, very large for so early a variety. The root is nearly globe-shaped, beautiful crimson color and often reaches an inch and a half in diameter before becoming pithy. Highly recommended for outdoor planting, also for forcing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

IMPROVED CHARTIER. Scarlet, shading to white. Roots are in good condition for the table when half an inch in diameter and remain in good condition until an inch or more in diameter. Excellent quality, flesh hard and crisp. One of the best outdoor varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, prepaid.

ICICLE. Often listed under other names. Is without doubt the very best long white radish grown. Roots long, slender, pure white, very sweet and crisp. A rapid grower and one of the most desirable radishes for outdoor planting, also adapted for forcing. Our seed is a high strain. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.



Early Scarlet Globe.

Spinach

This is an important crop for the market gardener. It is of easy cultivation. Sow for main crop in September, either broadcast or in drills one foot apart and one inch deep, in rich soil; the stronger the ground, the more delicate and succulent will be the leaves. Protect during the winter with hay or straw. For spring and summer use, sow as soon as the ground can be worked, and every two weeks for succession. One ounce for 100 feet of drill; ten to twelve pounds per acre.

GIANT THICK LEAVED. An early variety; very hardy and of good quality. Large, round leaves, nearly smooth, or dark green color; favorite with market gardeners. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.50.

PRICKLY WINTER. Use for fall sowing, as it is extremely hardy. Seeds prickly, leaves not so large as those of other varieties. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.50.

BLOOMSDALE, or SAVOY LEAVED. Of upright growth; leaves curled and crimped, thick and fleshy. Keeps well after cutting. Suitable for fall sowing. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.50.

Sunflower

MAMMOTH RUSSIAN. Heads very large and filled with striped seeds. This is the best and most prolific variety to grow for poultry. Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 35c, prepaid.



Savoy Leaved Spinach.

Rhubarb

Pie Plant, Wine Plant. Is the earliest of spring vegetables. Grown for its leaf stalk and used for pies, sauce, jelly, etc.

Sow in drills an inch deep, thin out to 6 inches apart. In the fall transplant in hills 3 feet apart in highly manured, deeply stirred soil. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, prepaid.

Sage

The most extensively used herb for seasoning and possesses medicinal virtues.

Hardy perennial, bushes 15 to 18 inches high. Sow in drill one inch deep, transplant to two feet apart. Plants may be divided. Pick leaves and tender shoots just as plant is coming into bloom; dry quickly in shade. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c, prepaid.

Squash

Plant when all danger from frost is past, and get in the winter varieties as soon as possible in order that they may mature. Plant in hills, 4 feet apart, for the bush varieties and 6 to 8 feet apart for running sorts. Put 6 or 8 seeds in a hill, thinning when all danger from insects is past to 3 or 4 plants in a hill. One ounce for 50 hills; 4 to 6 pounds per acre.

Fall and Winter Varieties

DELICIOUS. This is a new variety for which there is an increasing demand. It is top-shaped, of medium size. Hard, green shell. Flesh deep yellow; rich, fine grained, splendid for cooking. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

RED, or GOLDEN HUBBARD. A perfect type of the Green Hubbard, except in color, which is a bright deep orange yellow, very showy and attractive. Flesh deep golden yellow, much richer in color than Hubbard, fine grained, cooks very dry, and is of excellent flavor. Its keeping qualities are fully equal to, while in productivity it far excels the green variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

GENUINE WARTY HUBBARD. This is the king of all squashes. It is a little bigger and rougher than the old Hubbard and darker green. The standard winter squash; grown perhaps more generally than any other variety. Flesh bright orange yellow, fine grained, very dry, sweet flavored. Boils or bakes exceedingly dry, and is esteemed by many to be as good baked as the sweet potato. We have taken the utmost pains with this sort, and can recommend our stock as, in all probability, best in the country. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

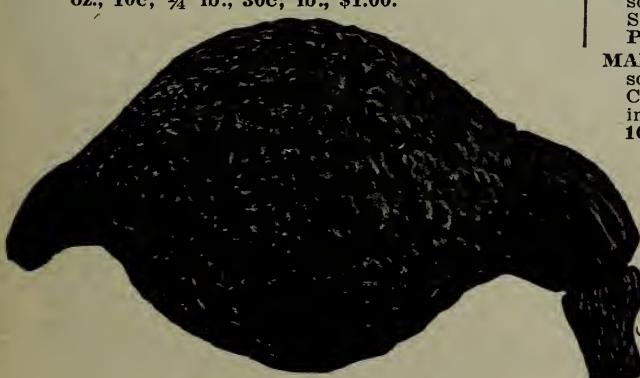
Early Summer Varieties

EARLY YELLOW BUSH. Very early variety, scalloped, somewhat flattened and medium size. Skin deep orange; flesh pale yellow, good flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

MAMMOTH WHITE BUSH. An early, round, flat squash; color clear white, handsomely scalloped. Called Patty Pan in the South. Largely planted in every section of the country. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

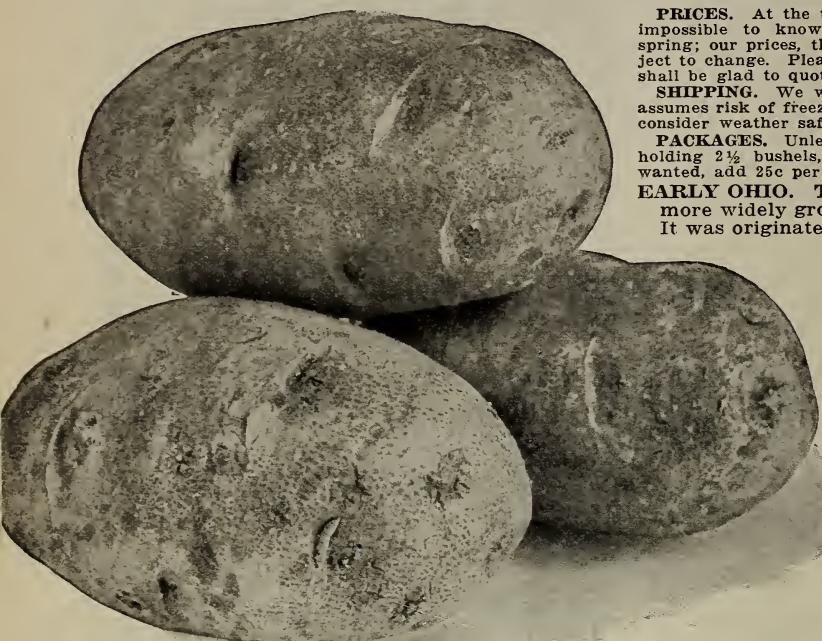
EARLY WHITE BUSH, or PATTY PAN. Is earlier than any other variety of dwarf habit; very productive. Summer squashes should always be used when young and tender, which can be determined by an impression of the nail. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

MAMMOTH SUMMER CROOKNECK. A well known and standard variety. Grows from 18 inches to two feet in length. The shell is hard and warty and of an attractive bright yellow color. The thick flesh is of good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.



Warty Hubbard Yellow Squash.

Northern Grown Seed Potatoes



Early Ohio Potatoes.

The Best General Purpose Potato Grown

EARLY PETOSKEY. This is one of the earliest, at same time, makes one of the best potatoes for storing and winter use that is grown. Planted early, the crop is ready for digging full as soon as the Early Ohio, but if planted a little later, the crop will mature before the late varieties and will carry through the winter as well as any of the later sorts. It is without a superior for cooking qualities. Flesh very white, cooks dry and mealy and for baking, it has no equal. In shape and size, the Petoskey is all that can be desired; round, to slightly flat, medium size and run very uniform, slightly russet skin, extremely shallow eyes, and never hollow. Vines strong and vigorous growth, flowers light purple and borne in great profusion. For yield, it is one of the most prolific. As a market potato and for home consumption, the Early Petoskey is without a rival; being of an early type, they are sure to mature, even if planted late, and many of the large growers in Michigan, where the variety originated, grow nothing else either for market or their own use. We recommend this potato as the best of all for any purpose. Prices, 1 lb., 20c, postpaid. One-half peck, 35c; pk., 60c; bu., \$2.00; 2½ bu. sack, \$4.50, not prepaid.

RURAL NEW YORKER. This splendid potato is one of the most widely cultivated. Oblong, inclined to round or round-oval, rather flattened; eyes few, shallow; skin pure white; flesh white. Medium late. Price, 1 lb., 18c, postpaid. One-half peck, 35c; pk., 60c; bu., \$1.75; 2½ bu. sack, \$4.00, not prepaid.

PRICES. At the time our list goes to the printer, it is impossible to know what the conditions may be next spring; our prices, therefore, are merely nominal and subject to change. Please write, stating requirements and we shall be glad to quote as low price as possible.

SHIPPING. We will ship any time ordered if customer assumes risk of freezing; otherwise will hold orders till we consider weather safe.

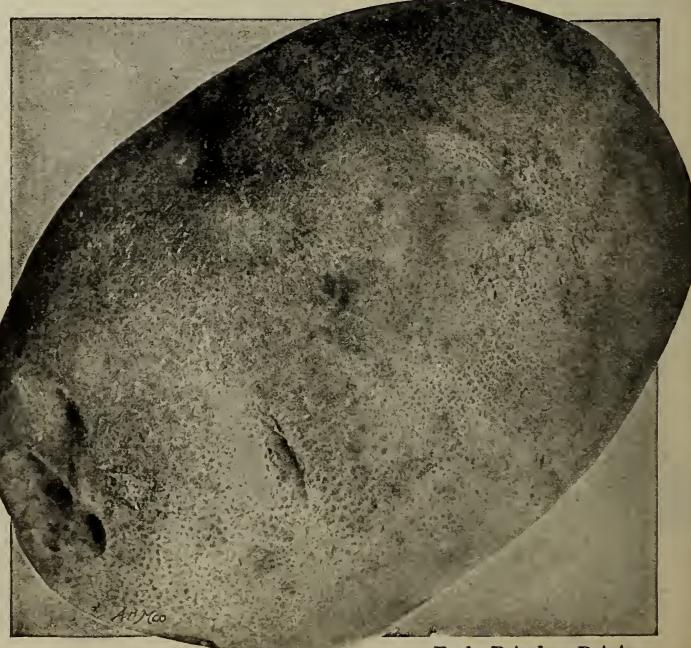
PACKAGES. Unless otherwise ordered, we ship in sacks holding 2½ bushels, no charge for sack. If barrels are wanted, add 25c per bushel to prices quoted.

EARLY OHIO. The Early Ohio is, without doubt, more widely grown than any other early variety. It was originated in 1871, as a seedling from the

Early Rose. Grown side by side with the Early Rose, it was found to be several days earlier and its yield one-third greater. Is similar to the Early Rose in color, but quite distinct in shape, being round-oblong instead of over-oblong. For cooking and keeping qualities, this potato is without a superior. Our seed is grown in the celebrated Red River valley, where the choicest stock in the country is obtained. Prices, 1 lb., 20c, postpaid. One-half peck, 40c; pk., 65c; bu., \$2.10; sack, 2½ bu., \$5.00, not prepaid.

STEUBEN SPECIAL. A medium size, oval, slightly flattened, white, somewhat russet, late potato of the finest quality. Is supposed to be a cross of the Rural New Yorker and Golden Russet possessing the yielding quality of the former and the cooking and keeping qualities of the latter. Lb., 20c, postpaid. One-half peck, 40c; peck, 65c; bu., \$2.00; 2½ bu. sack, \$4.50, not prepaid.

Use Adheso To control early and late blight, bugs, worms, and insects on beans, beets, melons, cabbage, cauliflower, celery, peppers, and tomatoes. **FOR POTATOES** use it according to directions.



Early Petoskey Potato.



Tobacco

With the cost of tobacco mounting higher all the time, why not cut expenses and at same time have a better article? Our seed is from the largest grower in the world; he does nothing else. Each variety adapted to our climate and one for every purpose.

Culture.—Pulverize the soil of the seed bed thoroughly and work in a liberal application of hardwood ashes. Sow seed as soon as danger of frost is over. When plants are 6 inches high, transplant into hills 4 or 5 feet apart each way and cultivate frequently. One ounce of seed will produce plants for an acre.

COMSTOCK'S SPANISH. The favorite variety in the Wisconsin tobacco district and one of the most desirable for states north of the Ohio River. It is the standard cigar leaf type and is considered the very best of cigar tobaccos. Leaf good size and suitable for wrappers or fillers. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

CONNECTICUT SEED LEAF. Grown in all sections of the United States and regarded one of the finest for cigar fillers. Leaf fine texture and delightful flavor. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

GENERAL GRANT. This variety ranks among the first for cigars. Leaf sometimes 44 inches long and is the earliest of all tobacco, maturing as far north as Duluth, Minn. The size, texture and shape of leaf makes this especially desirable for cigar and pipe. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

BIG HAVANA. A hybrid Havana or Cuban seed leaf. One of the earliest, fine texture and superior flavor. Desirable for cigars and cigarettes, also as a blend for pipe. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

SWEET ORINOCO. This tobacco has received more praise than any other known variety, as a plug filler and when sun cured makes the best natural chewing leaf. Leaf long and narrow, fine grained and excellent, sweet flavor. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

SLATE'S IMPROVED WHITE BURLEY. The best of all the Burley types. Leaf large, broad and fine texture making a most desirable plug filler and wrapper. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

OUR MIXTURE. For the accommodation of those who wish an assortment suitable for cigars, smoking blends and chewing, without having to buy a larger quantity of seed than they require, we have prepared a most desirable mixture. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.

Salsify or Vegetable Oyster

Sow the seed early in spring, in drills one foot apart and one inch deep, thinning out the young plants to four inches.

MAMMOTH SANDWICH ISLAND. The largest, smoothest and the very best in every way of all salsify. Pure white, very tender and of excellent quality. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, prepaid.

Tomato

Good plants can be grown where a frame is not available, from early February on in the house in boxes. Where a hotbed is handy, sow the seed, giving good bottom heat in February to March, and when the plants are three inches high transplant into other frames about 4 or 5 inches apart each way or plant into boxes which can be placed in the frames. Do not set the young plants in open before all danger of frosts is over, which is generally end of May to first week in June. Being very tender, they will not bear the least frost. Choose a light sandy or gravelly loam in sheltered situation, and if possible with southern exposure if early fruit is desired.

CRIMSON BEAUTY. We have no hesitation in pronouncing this the very earliest good tomato yet offered. While being fully as early as any other variety, it possesses qualities not found in any other early sort. Vines vigorous and exceedingly productive. Fruit bright crimson, large, smooth, coreless, and very few seeds. For shipping, no other early variety approaches it, and for slicing it is positively without a rival. Owing to the very limited supply of seeds we are offering only in packages and ounces. See page 2 for more detailed information. One pkg., 15c; $\frac{1}{4}$ oz., 50c; $\frac{1}{2}$ oz., 90c; 1 oz., \$1.50, prepaid.

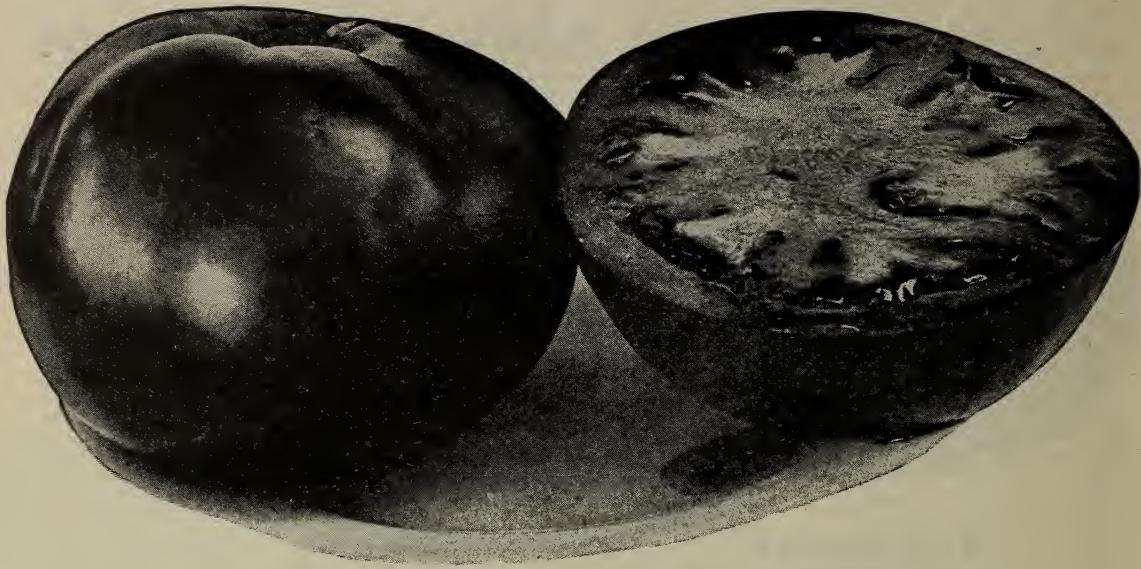
SPARK'S EARLIANA. We offer the finest strain of this remarkable early tomato. Without doubt the best early variety yet introduced. Vine small but vigorous and productive. Fruit large, smooth, uniform, nearly round, deep scarlet, solid. Is borne in clusters near the base of the plant. A very profitable sort for market gardeners. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$3.00, prepaid.

JOHN BAER. Of vigorous but medium growth, the vines stand good manuring and are enormously productive. Fruit of good size, bright red, extremely smooth, coreless, and very firm. In many respects this is without doubt one of the very best early tomatoes ever produced. Pkt., 10c; $\frac{1}{2}$ oz., 20c; oz., 35c; $\frac{1}{4}$ lb., \$1.25, prepaid.

MATCHLESS. Large, smooth, symmetrical, bright red, solid and meaty. Popular main crop variety in the East; highly recommended. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$3.00, prepaid.



Tobacco.



Trucker's Favorite.

TOMATOES—Continued.

ACME. A well known medium early tomato of great value. Vine large, hardy and productive. Fruit purplish-pink, round, smooth, good size and stands shipping. Flesh solid and of excellent flavor. Very desirable for home and market gardens. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.50, prepaid.

EARLY DETROIT. Largest and best formed of the early purple fruited sorts. Vine vigorous and very productive. Fruit is very smooth, uniform in size, firm and excellent quality. One of the best shipping early varieties yet introduced. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 90c; lb., \$3.25, prepaid.

BEAUTY. Vigorous and productive. Ripens a little later than Acme; uniform in size, smooth, very solid, large and splendid quality. One of the best medium early varieties. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.50, prepaid.

NEW STONE. The best late main crop tomato grown. Vine large and very productive. Fruit is round, very smooth, deep scarlet and uniform. Unequalled for slicing and canning. Seed is of high strain and carefully grown. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.25, prepaid.

PONDEROSA. Very large, purplish-pink, fairly smooth, very solid, few seeds and not very acid. Fine for slicing. Medium early and one of the largest. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50, prepaid.

TRUCKER'S FAVORITE. The finest large fruited purple tomato grown. Fruit continues of large size till the last and is unexcelled for slicing or cooking. Try this excellent variety. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75, prepaid.

GOLDEN QUEEN. Large, smooth; beautiful golden yellow; smooth and well shaped as the best of the red varieties; of superior flavor. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 90c; lb., \$3.50, prepaid.

YELLOW PLUM. Fruit small, but little more than a half inch in diameter. Color deep yellow; flesh yellow and splendid flavor. Highly esteemed for preserves. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.



Ponderosa.

Turnips

For early use, sow as soon as ground opens in spring, in drills from 12 to 15 inches apart; thin out to 6 or 9 inches in the rows. For succession, continue to sow every two weeks until June; for fall and winter crop sow in July and August. The Rutabagas are grown for feeding stock, and are also excellent for the table. Take up the roots in November, or before severe frosts; cut off tops within an inch of the crown, store in cool cellar or pit, or pile in a conical form out-of-doors, in dry ground; cover carefully with long straw, and finish by earthing up with about 12 or 15 inches of earth, leaving a trench around the heap to carry off water. One ounce of seed for 150 feet of drill; one pound for an acre.

PURPLE TOP WHITE GLOBE. A fine table turnip. It is an early and heavy cropper as well as a good keeper. The bulb is a very handsome globe, and is especially in demand among market gardeners. This is also a good turnip for stock feed, as it will grow to a large size if left for that purpose. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

PURPLE TOP STRAP LEAF. This is probably more extensively planted than any other variety. It is a very early flat turnip of medium size, the lower portion white and the upper part reddish purple. The flesh is fine grained and sweet. A splendid table variety and desirable also for stock feed. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

WHITE EGG. Belongs to the class of quick-growing fall turnips, and for this purpose should be sown, in this latitude, between August 10th and 25th. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50, prepaid.

The Crimson Beauty Tomatoes are very nice and bear awfully well.—JAS. CATCOT, Stone Creek, Ohio.



Purple Top White Globe.

ORANGE JELLY, or GOLDEN BALL. Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet introduced. Not of large size, but firm, hardy and of excellent flavor. Keeps well; superior as a table variety. Extensively used. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

EARLY WHITE FLAT DUTCH. A popular, early white, flat turnip of medium size. Smooth and of good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.

COW HORN. A long, white, carrot-shaped turnip, growing to a length of 12 to 14 inches. Flesh white and solid. Suitable for table use when small, and when matured excellent for feeding stock. This variety is sometimes planted to plow under as a fertilizer. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25, prepaid.



Purple Top Rutabaga.

Rutabagas

For feeding stock in the fall and winter there is nothing superior to Rutabagas, as they are much liked by all kinds of stock and serve to keep them in good condition. Ton for ton, they are worth one-third the price of the best Timothy hay.

SWEET RUSSIAN, or WHITE SWEDE. This very desirable variety is an excellent keeper and one of the best for table or stock. Tops small, strap-leaved. Roots very large, nearly globe-shaped, with small neck. Flesh white, very firm and sweet. Sometimes called Sweet Russian Turnip. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75, prepaid.

AMERICAN PURPLE TOP. A very large, globe-shaped Rutabaga, yellow with purple top. Hardy, vigorous growing variety of excellent quality for the table and one of the best for stock feed. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75, prepaid.

From the Kentucky Experiment Station.

We planted your Potato Seeds last spring and got a large assortment of all sorts, colors and sizes, as is usual with such seed. We saved a lot of the most promising ones to plant the coming season.
—C. C. MATHEWS, Horticulturist.

Crimson Beauty Tomato Growers who have tried this grand tomato are unanimous in saying it is the best they have ever grown. Not alone in one section, but almost every state in the Union, wet or dry, hot or cool, all seem to have had equal results. Read what they say.



Asters

Mixed Mammoth Varieties.

The Aster seed we offer are grown by a specialist who makes this one crop his entire business, and the mixture contains some of the newest novelties that florists list at extreme prices. Asters are hardy, easily cultivated, for cutting one of the most useful and at the same time one of the most beautiful of flowers. Pkt., 250 seeds, 15c; 2 for 25c; $\frac{1}{4}$ oz., 75c, postpaid.

Nasturtiums

No other annual will produce such a lavish profusion for so long a time with the small outlay of time and labor. The maximum of bloom is produced in thin soils, and never flags through the hottest weather. In soils too rich, leaves predominate, and the plants are apt to rot off in wet weather, especially if standing too close.

TALL, or CLIMBING NASTURTIUMS. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

DWARF NASTURTIUMS. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.40, postpaid.

Sweet Peas

Sweet Peas should be sown plentifully, as early as possible. They are usually grown in double rows with a wire trellis or a row of brush between. Make the drills about six inches deep and nine or ten inches apart. Change the location of the rows each season. At the time of planting cover with one inch of soil only, and fill in the drills as the young plants grow, taking care not to cover the top of the plants. A deep soil enriched by bone and a sunny situation is best adapted for their beds.

BLANCHE BURPEE. A fine, large, expanded flower, of snowy whiteness. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

LOVELY. Beautiful shades of soft shell-pink, changing to very light rose at outer edges. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

MISS WILLMOTT. Beautiful, large; color rich orange pink, delicately shaded to rose; wings orange pink. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

JEANIE GORDON. Bright rose, showing veins of lighter shade; wings primrose, tinted light pink. Very fine. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

LORD NELSON. The richest deep navy-blue. A very striking flower. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

ROYAL MIXTURE. A very choice and well-proportioned mixture of popular varieties and colors. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c, postpaid.

TRIAL GROUNDS MIXTURE. Seed in this mixture is saved from the trials and contains all the varieties of the Grandiflora type produced by one of the largest growers in California. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00, postpaid.

Giant "Spencer" Type Sweet Peas

The Spencer strain of Sweet Peas have all been derived from the original Countess Spencer, originated in England about fourteen years ago. The blossoms are much larger than the old Grandiflora type and combine the most exquisite colors with decided orchid-shaped flowers, frequently measuring $2\frac{1}{2}$ inches across. While profuse in bloom, the Spencer is a shy seeder and for this reason the seed is in limited supply and expensive, some of the novelties commanding very high prices. Pkt., 10c; $\frac{1}{2}$ oz., 20c; 1 oz., 35c; $\frac{1}{4}$ lb., \$1.00, postpaid.





FARM SEEDS

WE CONSIDER we are most fortunately located for handling the Farm Seed line, and believe in position to furnish the trade both quality and prices equal to any that can be offered.

As is well known, Farm Seeds are usually handled on small profits, therefore the overhead expense of conducting the business is a very important consideration in determining selling prices. In this respect we claim a decided advantage over firms located in large cities. We own our own buildings, hence effect a great saving in the matter of high rents that many houses have to reckon as a part of their costs.

In buying, we are favored by the fact that we are located in, and tributary to, the great seed growing sections of the country; thus having an advantage in the matter of freight rates.

Our storage facilities have been increased by the addition of a large brick warehouse, giving us a floor space of over 15,000 square feet in addition to a bin capacity of nearly 50,000 bushels, and our buildings are equipped with the latest and most approved cleaning machinery.

Pontiac has railroads radiating in five directions besides electric lines serving a large local territory, thus affording the best of shipping facilities.

For securing supplies we have buying connections in every part of the country, affording the best of facilities for getting stocks at first hand, and in sufficient quantity to admit of maintaining uniform quality of grades throughout the season.

Our guarantee of quality printed on page 1 applies to farm as well as garden seeds.

In all cases, our prices are as low as possible, consistent with high quality, and to meet the requirements of all classes of buyers, we are prepared to furnish different grades of clover, timothy, field peas, alfalfa, alsyke, and grass seeds. On request, we shall be glad to send samples and quote prices. As the market fluctuates

frequently during the season, it is impossible to make prices on many of the farm seeds at the time this catalog goes to press that would be effective later in the season, therefore we ask our patrons to give us the privilege of quoting prices when they are in the market.

All orders, whether large or small, will receive our most careful attention and be filled promptly at lowest possible prices.

Our trade reaches into almost every state in the Union and Canada, and the seeds we offer meet the requirements of the Pure Seed Laws of all the different states.

When you buy seeds under our brands, **BLUE BIRD**, **BOB WHITE**, **GROUSE** or **ORIOLE**, you may rest assured you are getting the best that grows, thoroughly cleaned and tested for purity and germination.



Alfalfa Field After Cutting.



Alfalfa Field Ready for Fourth Cutting.

IT PAYS TO
INOCULATE**ALFALFA**SEE PAGE 47
FOR BACTERIA

Like all legumes, there is always a certain per cent of Alfalfa seeds with hard hulls that resist moisture and do not germinate. Prof. Arny, of the Minnesota Experimental Station, is authority for the statement that of all the Alfalfa seed sown in that state, 30 per cent is hard and in individual cases, 50 to 75 per cent cannot grow.

Alfalfa requires a deep, well drained seed bed and is best adapted to loamy, gravelly soils. To insure success, a free application of lime or ground limestone is essential and especially if the soil is sour or acid. For best results the ground should be well settled and free from weeds.

Inoculation, while not always necessary, is no doubt advisable, and for this purpose we offer Edward's Legume Bacteria. This is one of the most reliable cultures ever offered, being a nitrogen fixing bacteria prepared for the inoculation of all legume crops, and our prices are much lower than other seedsmen ask for similar preparations. See full description and prices on page 47. Soil taken from sweet clover patches and mixed with the seed before sowing or scattered over the field affords satisfactory inoculation and a great many have been successful by sowing sweet clover seed mixed with alfalfa seed in the proportion of three pounds of sweet clover seed to twelve or fifteen pounds of alfalfa. This requires the least trouble and is said to be effective. Sweet clover adapts itself to almost any kind of soil and, being a biennial, it runs out in two years, leaving large roots in the ground to fertilize and furnish the necessary nitrogen for alfalfa, or clover. Probably the surest method of inoculation is to sow the field to sweet clover, which for the two years that it lasts will afford two or three good hay crops and is then plowed under, putting the land in the best of shape for either alfalfa or clover. No better treatment is possible for light or worn out soils.

Great care should be taken in selecting alfalfa seed. Under no circumstances use a seed that has been grown in a more southern latitude than where it is to be used. For our northern trade, we make a specialty of the best selections to be obtained in Montana, Wyoming, Utah, Idaho, and Kansas, where the finest seed in the world is grown, particularly that produced at high altitudes on dry, non-irrigated lands. This seed is

hardy, vigorous and well acclimated to the climate of our northern and eastern states.

Our Oriole Brand Alfalfa is the cream of all northwestern seed and represents only the choicest crops, beautiful color, plump and clean, with a purity test of 99.5 per cent or better. After buying, the seed is shipped to Pontiac, where it is graded up and recleaned by use of the best machinery made. Some lots that we get, while not

having all the scoring points that we require for Oriole Brand, are very handsome seed, showing high germination and purity with all the other characteristics of high grade seed and much better

than is usually sold for "our best seed," "American grown," etc., but which we sell at a less price than Oriole. It will, therefore, pay to get samples from us before buying.

Considerable success has followed spring seeding, either alone or with a nurse crop, but the best results are usually obtained by a thorough cultivation of the soil till mid-summer, getting rid of weeds, then seeding in August or September, before the fall rains begin, which gives the plant a good start before winter.

Alfalfa has added more wealth to the United States than any other forage crop. It can be grown almost anywhere, no doubt 90 per cent of the farms in the northern states will produce it successfully if given a little intelligent attention, and surely no other crop will add so much to the grower's bank account.

Increased Germination

By our special process for treating Alfalfa seed we increase the germination 25 to 50 per cent. See a more detailed reference to this treatment in what we say about Sweet Clover on page 35. While this is more important for the latter, yet there is no doubt regarding its value for Alfalfa, and the slight charge made for treatment will be more than offset by the better stand and less seed required. If treated seed is wanted, add 50c per bushel to price.

Sow 10 lbs. treated Alfalfa and 2 lbs. treated Sweet Clover, and if you prefer the Alfalfa alone, 12 lbs. treated or 15 lbs. natural seed per acre.

Price, Treated Oriole Brand, 1 lb., 35c, prepaid. Ask for bushel prices.

IF YOU WANT the best seed money, skill and painstaking effort can supply, buy our

ORIOLE BRAND

CLOVER SEED

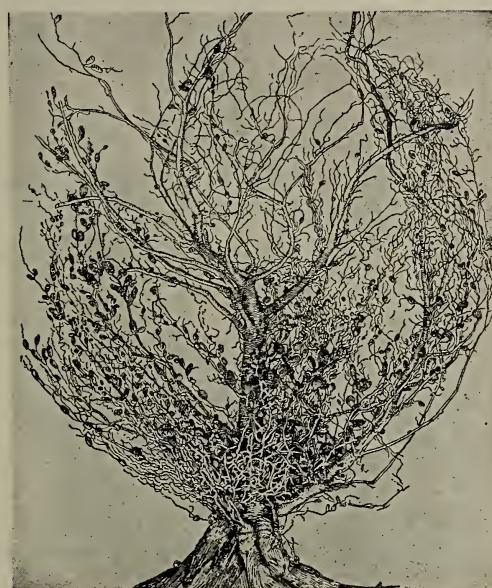
Of all the crops grown on the farm, clover is without doubt the most important; not only because of its market value and importance as a forage crop, but its great value as a fertilizing agent. Without it, immense sums would have to be expended annually for commercial fertilizers, and even then the benefits would not be as great as those obtained from clover. Many farmers hesitate using this valuable seed as freely as they should, fearing they may not secure a catch, or on account of the cost, which they appear to regard as an expense, rather than an investment returning them profits in many ways.

When the many benefits derived from clover are considered, it must be plain to any farmer that he cannot afford to economize too much in its use. As a forage plant some one of the different varieties is adapted to every section of the country, and taken altogether there can be no doubt that the clovers are the most valuable of all our forage crops. By using good seed, the grower is most likely to derive a benefit first from the hay crop, then the seed crop, and greatest of all, the upbuilding and maintenance of his lands. Show us a farm where clover has been grown freely and we will show you a money making owner.

No department of our seed business receives more painstaking attention than that given to clover seed, and it constitutes a large percentage of our entire seed business; in fact, we specialize in these seeds and feel safe in saying that no house in the country can offer better values, either as regards quality or price.



Medium Red Clover.



Roots of Clover Showing Nodules.

COMMERCIAL FERTILIZERS WITHOUT POTASH—The European war has shut off our supply of potash, therefore the value of commercial Fertilizers for many farms is of doubtful value. Clover, however, is always the same and there is no land that is not benefited by its use.

Red Clover

IT PAYS TO INOCULATE.

MEDIUM, or JUNE is the variety most generally grown. It succeeds on a great variety of soils, but those best adapted are deep, well drained clay loams and lime-stone soils. Moist sandy loams, well supplied with humus are also well adapted to red clover, but it will not succeed well on dry sandy, or porous gravelly soils. Unlike alsyke clover, it does not do well on wet, soggy or peaty soil. As a soil improver, in general farming, red clover is without an equal. Besides yielding 1 to 2 tons of hay to the acre, it leaves a large amount of residue in the form of vegetable matter in the soil. Plowed under green, it furnishes the soil with a great amount of nitrogen, which it derives largely from the air, and in this respect is one of the most valuable of all fertilizers.

Medium clover should, when wanted for hay, be cut when the heads are just coming into bloom. The second crop is the one that produces most seed. If not wanted for hay, it may be pastured till about the first of June, then allowed to seed.

Seeding is usually done in the spring on fall grain crops. Some still prefer sowing in early spring when the ground is checked from the action of frost, but of late years, seeding with spring grain crops has become more common. When sown alone, 7 to 12 pounds of seed are required per acre, but when sown with timothy about 6 pounds per acre is sufficient.

Michigan has the reputation of producing the best clover seed, and as we are located in the center of the seed district, our facilities

MEDIUM RED CLOVER—Continued.

for securing choice selections are unequaled. We pride ourselves on the quality of clover seed that we furnish. Our **BLUE BIRD BRAND** Medium seed is without a superior on the market; selected with great care, recleaned thoroughly, we are confident no better seed can be procured. We have other good grades that comply with the pure seed laws and will be glad to furnish samples.

Genuine Mammoth Red Clover

Sometimes called Bull, Large English, Sapping, Giant and Soiling Clover. This variety grows coarse, and while not as suitable for hay as the Medium, is more valuable as a fertilizer. It matures but one crop a year, and is more sure to afford a seed crop. When grown for this purpose, it should be pastured till the first of June, or it may be clipped at about that time with a mower.

For restoring land or for general fertilization, there is nothing more valuable than Mammoth Clover. It yields a large growth and when turned under will loosen and improve the working of heavy clay soils better than any other crop.

As it is impossible to distinguish the seed of Mammoth from Medium, the seedsman must take the word of the grower or dealer from whom he buys. We therefore handle only such lots as can be obtained from the most reliable sources and take great care to keep the two separate. In the large markets the two are handled together, no particular pains being taken to distinguish between them, hence dealers who draw their supplies from such sources are never very certain as to what they are offering.

The use of Mammoth Clover has increased very rapidly the past few years, many farmers finding it a most profitable crop to grow for seed, while for the purpose of restoring depleted soils or enriching poor land, there is probably no crop that will show better results. We take the same care in making our selections of Mammoth that we do in securing the best grades of Medium, and we offer the choicest of the crop under our **Grouse Brand**. We also furnish other good grades under other brands and at different prices.

In the sections where most of the Mammoth Clover is grown, conditions were not so favorable as in the June or Medium districts and, while quality was generally good, yield was light. As usual, we took steps to secure the choicest lots to be had for our **GROUSE BRAND**, which will be found exceptionally fine in purity, color and germination. When you buy this brand, you may rest assured you have the cream of the crop.

Alsyke Clover

Alsyke is a perennial, intermediate in size between Red and White Clover. The fragrant blossoms are of a pinkish color and furnish large quantities of honey, it being often sown by bee-keepers for that purpose. It succeeds well in moist, low lands and on heavy clay soils; in fact, may be grown in any section where clover thrives, and on a class of soils that are not so well adapted to red clover.

Hay—When well cured, there is no hay more greatly relished by stock of all kinds. Mixed with timothy, it affords one of the best forage rations and the two are grown very successfully together, the hay from such a mixture being better than either of them alone. In the northern states a favorite mixture is 4 pounds of Alsyke and 8 pounds of timothy per acre. In the more southern states, 10 pounds of Orchard Grass, 5 pounds perennial Rye Grass, 3 pounds Red Top and 4 pounds Alsyke per acre is a common mixture.

Alsyke is harder than either Mammoth or Medium clover, but lodges more than either, hence the advantage of seeding with some of the grasses.

When sown alone for seed or hay, from 5 to 8 pounds per acre are required.

Michigan is noted for its fine alsyke, and the best seed in the country comes from this state. Our facilities for securing fine quality are the best, as we are located in the heart of the seed district.

Seed—OUR BLUE BIRD BRAND is made from the best lots that we can obtain and is a strictly



Alsyke Clover.

fancy article of high purity and germination.

We are willing to let you be the judge and ask that you compare this brand with any other alsyke seed you can find. If it is not the cleanest, best matured and purest of all the samples you get, we will not ask for your order. A request will bring sample.

Price: 1 lb., 40c; 10 lbs., \$3.70, postpaid. Ask for bushel prices.

Conditions through the season of 1917, seem to have been unfavorable for clover seed in all parts of the world. The large producing states of Michigan, Ohio, and Indiana, all had the lightest crops in many years. Under normal conditions, this country takes about two million bushels from Europe, but this year, the situation is reversed and light as our crop is, several thousand bags of our seed has been exported to England. We may therefore, expect a scarcity until another crop and as the season advances, must look for higher prices, though the price is not likely to be out of proportion to other farm crops and should not prevent the usual seeding, as all hay crops another year will bring high prices, besides the use of clover is necessary if the fertility of the soil is maintained.

We have one of the largest stocks in the country and our quality is unsurpassed. Get our samples and prices before placing your order.

White Clover

White or Dutch Clover is a perennial of a creeping nature, and is used mostly in lawn mixtures, although it is a valuable addition to pasture mixtures, using one to three pounds per acre. Best adapted to low meadows where not too wet.

On lands suited to its growth it will last indefinitely, though it may be crowded out by the grasses certain seasons, only to reappear the next season. Invaluable in lawn mixtures, imparting a dark, rich green to the lawn, and holding its color with the grasses till after freezing weather.

The best seed comes from Germany or France, and we pay particular attention to the quality we import, as we have a large trade in lawn mixtures which has been secure through the high quality of seed that we have supplied. On this account we require the best that can be obtained, and saving all middle profits, are able to sell this high grade seed at same price most dealers ask for inferior grades.

Price: 1 lb., 65c; 5 lbs., \$3.00, postpaid. Ask for prices on larger quantities.

Sweet Clover

Sweet Clover is a biennial, leguminous plant. There are two varieties, the yellow and the white blossom, but the latter is the more valuable.

White Blossom Sweet Clover, *Meliolitus Alba*, sometimes called Bokhara Clover, resembles alfalfa when young. The root system of Sweet Clover is one of its most notable features. During its first season of growth, the root develops to a large size, striking deep into the soil and becoming quite fleshy, often reaching a diameter of one-half inch at the crown. The fleshy character of the root means the addition of a great amount of vegetable matter to the soil, even when the top is removed as a hay crop.

Sweet Clover was used as a food for animals 2,000 years ago. The most prominent use at present is that of a soil improver. "In this role there is no other plant which so quickly puts waste land or run-down farms back into condition for producing crops." Government Bulletin, 19351. The roots have been estimated at about 20 tons green weight per acre in a good crop of Sweet Clover. The decay of the fleshy roots at the end of the second year, when the plant dies out, opens up the soil and provides a passage for water and air

into the subsoil. It is better adapted to short rotation than alfalfa.

Seeded in the spring, either alone or with a nurse crop, it produces its greatest growth the next season, and is ready to turn under for green manure or utilized as a hay crop. As a bee pasture it ranks among the best. It thrives on the poorest or the richest soils.

Failure of farmers to make use of this valuable plant has been a fear that it could not be eradicated. This is a mistake, for the biennial nature of the plant renders this problem easy. If cut as hay and not allowed to reseed, it goes out in two years, leaving behind a vast amount of valuable fertilizing material.

Considering the many advantages possessed by Sweet Clover, a more extended use of it in the improvement of worn-out lands, inoculation of soils for alfalfa and soil improvement is strongly recommended by the Department of Agriculture.

The Kind of Seed to Buy and How Germination Is Increased

Sweet Clover and Alfalfa Seeds have hard shells, a portion of them so hard moisture can not penetrate and they do not germinate. For this reason only about 15 PER CENT OF UN-HULLED SEED WILL GROW; 85 per cent is worthless. Hulled Seed contains 30 to 50 per cent of hard seeds that will not germinate under ordinary conditions. In various tests hard seeds have been planted under ideal conditions for germination for months and years without growing. To overcome this natural condition we have at heavy expense installed a process for treating these seeds that increases the germination of Sweet Clover 50 to 100 per cent and Alfalfa 25 to 50 per cent. The largest grower in Illinois writes: "We sent 100 lbs. for treatment and on testing the seed after it returned, found it germinated 94 per cent. The same seed before treatment germinated less than 50 per cent. Have just sown 25 acres of Sweet Clover and find the seed is coming up very thick and sowed at the rate of 10 pounds per acre."

This treatment is for germination only and does not take the place of inoculation, which is for the purpose of fixing nodules to the roots and furnishing nitrogen to promote growth. By our process for increasing germination and the use of Edward's Pure Bacteria, we firmly believe good stands of either Sweet Clover or Alfalfa can be secured on any suitable land and save several times the cost of inoculation by the less amount of seed used.

Sweet Clover requires a thoroughly compact seed bed, with just enough loose soil on top to cover the seeds. It is usually best to seed on ground like corn stubble that does not require plowing, or can be sown with alfalfa in the spring on ground that has been rolled or well settled.

Sow 10 pounds of our treated seed, or 15 to 20 pounds of untreated hulled seed, or 20 to 30 pounds of unhulled seed per acre. We do not handle the unhulled seed and do not recommend it.

Price, 1 lb., 45c; 5 lbs., \$2.00; 10 lbs., \$3.75, postpaid. Ask for special prices on larger lots.



Sweet Clover.

Alsyke and Timothy Mixtures

No combination affords a better hay than alsyke clover and timothy. Cut at the proper time it cures a beautiful green color, fragrant and sweet, and there is nothing grown as a forage that is so highly relished by all kinds of stock. This combination is highly recommended by agricultural experiment stations and the Department of Agriculture. The alsyke forms a thick bottom, increasing the amount of hay as compared with timothy alone, besides affording a much better feed than clear timothy.

Alsyke and timothy are both perennials, both thrive on the same kinds of soil, they mature at the same time, therefore are well adapted for a combination which cannot be too highly recommended.

Michigan farmers have long appreciated this combination, hence have grown it extensively for years, a great many of the crops being threshed for seed. As the two seeds are about the same size, it is impossible to make a clear separation, and as the mixture is not a standard on the market, the seed is bought at considerable less price than would be the case if they could be separated. For this reason we are able to sell a high grade mixture at two to three dollars a bushel less than the same seed would cost if bought separately. As some growers prefer a larger proportion of

alsyke than others, we offer different mixtures at different prices, according to the percentage of alsyke. By our recleaning process, these mixtures are of uniform character, free from noxious weeds, making them just as desirable to use as though the two were bought separately and mixed.

To secure best results, sow in the spring with a light nurse crop of wheat, oats or barley.

Price: 1 lb., 20c; 5 lbs., 90c; 10 lbs., \$1.75, postpaid. Not prepaid, 50 lbs., \$6.00. Bags 35c each.

Permanent Pasture Mixture

This is a combination of grasses, clover, alfalfa and sweet clover. As the clover "runs out," the perennial grasses and alfalfa are becoming established, making an all-season pasture. In case of low, undrained soil, the alfalfa will not succeed, but the mixture is intended to be as near suitable for all kinds of soil as possible. It being difficult to separate some of these seeds, they are carefully recleaned and sold at a lower price than would be possible if offered separately. Prices, prepaid, lb., 20c; 10 lbs., \$1.75. Not prepaid, lb., 15c; bu., 50 lbs., \$6.00. Bags 35c each.

Another Record Broken

In our 1917 catalog we made the announcement that our Garden Seed Business for 1916, showed an increase of 339 per cent over that of 1915. This was such a remarkable growth, we could hardly expect to match it again, but to our great pleasure, our sales for the season of 1917 were almost 100 per cent greater than the year before. What better proof could be offered, that our service is satisfactory?

The coming season all seedsmen will be confronted with conditions different than ever before

experienced. War and unusual weather during the past year, has taxed their best efforts to obtain supplies which in many things, will fall far short of meeting requirements.

We cannot urge our customers too strongly to send their orders early and even then, so far as possible, would suggest making second choice, or authorizing substitution of similar sorts.

With best wishes for a successful year, we remain,

Faithfully yours,
THE C. E. DePUY CO.

Sudan Grass

Sudan Grass is an annual of the Sorghum type. It was introduced into this country by Mr. C. V. Piper of the U. S. Department of Agriculture in 1909. The success of this new crop was at once remarkable, and by 1913, demand for seed was so great it sold for \$2.00 per pound.

Unlike other sorghums, it is very fine stemmed and leafy; stems about the size of a lead pencil and grow to a height of 5 to 7 feet. It is essentially a dry weather crop, the past season being too wet for its success; but in ordinary seasons it is sure to prove a most valuable addition to our forage crops. Can be cut twice, or allowed to seed and then cut. Cures a beautiful green color, making a hay or forage of great value on account of the large amount of saccharine matter and protein, thus is especially valuable for dairy cattle. Said by government authorities to be the best ensilage crop known and by many growers to make a more valuable forage than alfalfa.

Plant when the ground is warm, about when corn is planted, in rows 18 to 30 inches apart, and cultivate as corn. Unless the season is very dry, two or three cultivations are sufficient. May be cut when 3 to 4 feet high, when a second crop will come on. Is best adapted to light, dry soils. Use two to four pounds of seed to the acre, according as to how close it is drilled. Will send a special bulletin on request.

Prices, pkt., 10c; lb., 30c, postpaid. Prices subject to market changes. For larger quantities see our Special List.



Sudan Grass.

NATURAL GRASSES



Kentucky Blue Grass.

Canadian Blue Grass

Is a hardy perennial usually growing 6 to 8 inches high; is dark blue color and resembles Kentucky Blue Grass, to which it is related. Canada Blue Grass appears commonly in the northern states, bordering on Lake Erie, and in New England.

Under most conditions, there is no doubt that Canada Blue Grass is decidedly inferior to Kentucky Blue Grass, though by no means worthless. As a pasture it possesses considerable value and in some sections is considered more valuable for this purpose than Kentucky Blue Grass. In the South it has been found to stand heat better than the former, and for this reason is valuable for lawns, especially as it stands close clipping. We do not recommend it for hay.

It has been imported from Canada extensively and sold for Kentucky Blue Grass, a practice that should be condemned.

Prices: 1 lb., 35c, postpaid. Not prepaid, 1b., 25c; 100 lbs., \$22.00.

Kentucky Blue Grass

Is the most important cultivated pasture grass in the United States, is palatable, nutritious, productive, and can be grown over a large region. Kentucky Blue Grass is a hardy perennial with an abundance of basal leaves of dark green color and of a low-growing habit. It forms a thick, tenacious sod, making it especially useful in lawn mixtures and for pasture.

For pastures it may be sown in the fall or spring, and is usually combined with timothy and red clover or alsyke. It is also used extensively in combination with orchard grass, meadow fescue and other grasses. For a permanent pasture a mixture of 7 pounds Kentucky Blue Grass, 3 pounds alsyke, 3 pounds meadow fescue, and 3 pounds orchard grass makes a most desirable combination.

For lawns, a mixture in the proportion of 16 pounds Kentucky Blue Grass, 3 pounds red top and 1 pound white clover will produce good results in almost any kind of soil. Seed should be sown at the rate of 50 to 75 pounds per acre.

The legal weight of blue grass is 14 pounds to the bushel, but we obtained our supplies direct from the famous Kentucky Blue Grass region, taking pains to secure the very highest grades, and the stock we offer weighs 21 to 22 pounds per bushel.

Prices: 1 lb., 40c; 5 lbs., \$1.90; 10 lbs., \$3.75, postpaid. Not prepaid: Lb., 30c. Ask for special price on larger lots. Subject to market changes.

Creeping Bent Grass A fine leaf, hardy, native perennial. In texture it far surpasses any of the other grasses, though the color of the leaf is somewhat lighter than Kentucky Blue Grass. It does not grow high enough to be counted a hay grass, its chief use being in mixtures for lawns and as a bottom grass for permanent pastures. It is especially valuable for golf links, constant tramping appearing to benefit it rather than injure it. Price: 1 lb., 60c postpaid.

Meadow Fescue or English Blue Grass Is a hardy perennial grass. Does not propagate by root stalks or form a very heavy sod, neither is it as bushy as orchard grass. Is valuable as a meadow grass, furnishing early and late feed. This grass has not received the attention it deserves. Price: 1 lb., 35c; 5 lbs., \$1.40. Not prepaid: Lb., 25c.

Orchard Grass Considered a hay grass, but does not possess as high feeding value as timothy. Its chief value is for pasture and combined with other grasses and clover is valuable for this purpose. It is sometimes recommended for lawns, but should not be used for this purpose, as it grows in bunches, producing a large, coarse leaf. It furnishes an abundance of early and late pasture, standing close cropping. Price: 1 lb., 40c; 5 lbs., \$1.90, postpaid. Not prepaid: Lb., 30c; larger lots at \$27.00 per hundred.

Perennial Rye Grass Sometimes called English Rye Grass. Is a perennial, succeeding best on damp clay soils. Is better adapted to short rotations than some of the other grasses, and is valuable in permanent pasture mixtures. Price, 1 lb., 20c; 5 lbs., 90c, postpaid. Not prepaid: Lb., 20c; 5 lbs., 90c; 10 lbs., \$1.50. Larger lots at \$10.00 per hundred.

NATURAL GRASSES—Continued.

Red Fescue A creeping rooted grass, resisting extreme drought and especially valuable for shaded locations, in lawns or exposed hillsides. Forms a close, heavy turf, making it valuable for golf links. Sow 30 pounds to the acre. Prices, 1 lb., 45c, postpaid. Not prepaid, lb., 35c; 5 lbs., \$1.25.

Red Top Is essentially a pasture grass, thriving best in moist or heavy clay soils. Stands great extremes of temperature. While considered a hay grass, the hay is not relished by stock and therefore not as valuable as timothy. It is valuable in pasture mixtures, as it produces leaves close to the ground, thus working well with orchard and some of the more erect grasses. The seed comes on the market in two forms, in the chaff and without chaff.

Fancy Hulled Red Top. Weighs about 36 lbs. to the bushel. Sow 8 to 10 pounds to the acre. Prices, 1 lb., 35c; 5 lbs., \$1.60, postpaid. Not prepaid, lb., 30c; 5 lbs., \$1.40. Larger lots at market.

Unhulled Fancy Red Top. Weighs about 14 pounds to the bushel. Sow 20 to 30 pounds to the acre. Prices, 1 lb., 25c; 5 lbs., \$1.10, postpaid. Not prepaid, lb., 20c; 5 lbs., 90c. Larger lots at market.

Sheep's Fescue A small tufted hardy perennial grass, valuable in mixtures for lawns, in shady or dry locations. Sow about 30 pounds to the acre. Prices, 1 lb., 45c; 5 lbs., \$2.10, postpaid. Larger lots at market.

Timothy The most valuable of all the hay grasses grown in America, and to some extent adapted to pastures. A frequent mistake is made in keeping the timothy meadow down too long. In most locations it does not pay to maintain a timothy meadow more than two or three years. Is frequently sown with clover, but matures later than the Medium or June. The best of all combinations is timothy and alsyke clover. We make a specialty of timothy, handling large quantities, and offer several grades. As the market fluctuates frequently, we prefer quoting prices on application, but assure our customers high quality and low prices.

EAGLE BRAND. For this brand we use only the choicest selections of western seed, showing a purity of at least 99.5 per cent and high germination. We take great pains to maintain a uniform, high quality for this brand and can recommend it to those farmers who wish to feel they are getting the best grade possible and to be sure of freedom from noxious weeds. Price, 1 lb., 20c, postpaid. For larger lots ask for special market price.

Wood Meadow A hardy, perennial grass with creeping root and fine, bright green leaves growing closely to the ground. It is especially valuable in lawn mixtures for shady locations and particularly in parks. Sow about 30 pounds to the acre. Prices, 1 lb., 65c; 5 lbs., \$3.00, postpaid.

Lawn Grass Seeds

To obtain a good lawn it is very essential that care be used in selecting the seed. Many people are under the impression that there is danger in getting weed seed in lawn mixtures; this impression no doubt has been formed because it is a common practice to top grading off with rich dirt taken from some location that has not been under cultivation, hence contains the seeds that are common to that locality. When such soil is used it should be cultivated long enough to free it from such seeds, then sow a reliable lawn mixture, when better results will be obtained than by sodding, and at much less expense. We pay particular attention to lawn grasses and are prepared to furnish mixtures for any situation or condition. Our regular brands are made from the finest seeds to be obtained.

VELVET BRAND FOR OPEN LOCATIONS. A strictly high grade seed. Sow 1 lb. to 400 square feet. Prices, 1 lb., 40c; 5 lbs., \$1.90. prepaid. Not prepaid, lb., 30c.

VELVET BRAND FOR GOLF LINKS. Suitable for general purposes, but advise special mixtures prepared for the location and conditions of soil, etc. We will be pleased to advise with customers and request that they give us a description of soil, drainage, how much is rolling or hillsides, and how much of the land is level, when we will prepare suitable mixtures for the different parts.

BELLE ISLE BRAND. A good general lawn mixture made from choice seeds. Price, 1 lb., 35c; 5 lbs., \$1.65, postpaid. Not prepaid, lb., 30c; 5 lbs., \$1.40.

Millet

HUNGARIAN. This variety possesses a small, compact seed head. The color of the seed varies from dark yellow to black. It matures intermediate between the common and the German. Yields practically same as common. The quality of hay is first class. For hay sow broadcast from May 1st to August 1st, about 25 pounds per acre. Prices: 1 lb., 15c. Ask for market prices on larger lots.

MILLET, COMMON. This is the best known and most widely grown of the millets; fine stemmed and leafy, with a compact head. Seeds light yellow. Matures somewhat earlier than Hungarian and produces a heavy crop of splendid foliage. Sow and cultivate like Hungarian. Price, 1 lb., 15c. Ask for market prices on larger lots.

MILLET, GERMAN. This variety is coarser than the common, with broad leaves and head not so compact. Seeds bright yellow. Requires about two weeks longer to mature than the common. Sow and cultivate same as Hungarian. Price, 1 lb., 15c. Ask for market price on larger lots.



Millet.

Field Beans

The handling of commercial beans represents a very important part of our business. Michigan is the greatest bean-growing state in the Union, and produces the best in the world. We handle hundreds of carloads of hand-picked Pea, Red Kidney, White Kidney and Yellow Eye. In addition to furnishing the finest seed stock, we are also prepared to supply cooking beans at prices much lower than if bought second or third hand. Many of our customers make up club orders with seeds, taking advantage of the bushel prices and saving on freight. Prices subject to market changes.

The seed bean situation being so unsettled at the time this goes to press, we cannot quote prices intelligently, and in the interest of our customers, believe it better to give them the benefit of lowest possible prices, which we shall be pleased to quote on request. Following quotations are nominal and subject to change.

PEA BEANS. Sometimes called Navy Beans. Are more extensively grown than any other variety. Our seed stock is the choicest selections of the genuine White Wonder variety, the most prolific and handsomest pea bean ever grown. Price, pkt., 10c; lb., 30c; 5 lbs., \$1.35, prepaid. Ask for special bushel prices.

LARGE WHITE MARROW. An old and well known variety. Large, spreading vine, with short runners. Seed white, large oval. Matures about same time as the Kidney Bean. Cooks dry and mealy, being preferred by many to any other variety. Price, pkt., 10c; lb., 30c; 5 lbs., \$1.35, prepaid. Ask for special bushel price.

RED KIDNEY. This variety is coming into more general use, being in great demand by canners. A large, handsome, kidney-shaped bean of light

red color. Requires a strong, heavy soil; matures about ten days later than the Pea Bean. Price, pkt., 10c; lb., 30c; 5 lbs., \$1.35, prepaid. Ask for special bushel price.

WHITE KIDNEY. One of the best cooking beans grown. It affords a most delicious dish when properly baked. Requires about the same soil conditions suitable for Pea Beans, but are a week to ten days later. Price, lb., 30c; 5 lbs., \$1.35, prepaid. Ask for special bushel price.

YELLOW EYE. This is one of the most prolific beans. The seed is similar in shape and size to the White Marrow, but has a large yellow blotch around the eye. A splendid cooking bean, both for baking and boiling; cooks dry and mealy. Pkt., 10c; lb., 25c; 5 lbs., \$1.10, prepaid. Ask for special bushel price.

Field Peas

Field Peas are one of the most valuable legume crops and succeed well on almost any kind of soil, though do best on a clay loam. As a forage crop, one of the most useful especially for dairy cows and pigs. Ready for use six weeks after sowing and no crop can be grown that will afford more useful feed at a season of the year when other feeds are scarce. For young pigs or hogs nothing is more valuable. Peas require deep planting to obtain best results; they may be sown broadcast and plowed lightly under, or if sown on plowed land should be well harrowed. The common practice is to sow peas and oats together. In this case the peas should be sown first as above and the oats afterward, using 1 to 1 1/2 bushels of each to the acre.

CANADIAN FIELD PEAS. Undoubtedly the best of all Field Peas. The stock we offer is of best quality and being near the source of production we are able to secure choice selection. Our Fancy Grade is saved from the very choicest lots and represents the cream of the crop. We have other grades and will be glad to furnish samples and prices on application. Pkt., 10c; lb., 20c; 5 lbs., 90c, prepaid. Not prepaid, by the bushel, lowest market price.



Cow Peas Growing in Corn.

Cow Peas

The Cow Pea is a valuable crop in various ways. It is one of the strongest growing legumes and when well inoculated draws heavily upon the nitrogen of the air, therefore is a good soil renovator. It can be cut for hay and makes a most excellent forage, is valuable for pasturage, and one of the best soilings crops. As a green manure it is one of the most valuable for increasing the supply of humus and nitrogen in the soil. The crop is deserving more attention than it has received. For seed production they should be sown in drills, 30 to 36 inches apart, using 30 pounds of seed to the acre. For hay or soilings, sow broadcast, using 60 pounds of seed to the acre, when the soil is warm.

Cow Peas do best in a warm, dry season and should never be planted till the ground is warm. Farmers who have learned to handle the crop consider it one of the most profitable and it is fast gaining in cultivation. It puts protein in ensilage, makes a valuable, succulent hay, and is one of the best natural fertilizers.

BLACK-EYE. A medium late variety; vines erect and vigorous. In many sections regarded as one of the most satisfactory. Price, pkt., 10c; lb., 20c; 5 lbs., 90c, prepaid. Ask for special bushel price.

WHIPPOORWILL. One of the best general purpose varieties. Vines erect, vigorous, and yields well in hay and seed. Price, pkt., 10c; lb., 20c; 5 lbs., 90c, prepaid. Ask for special bushel price.

SPECIAL MIXTURE. This mixture is intended to be adapted to all kinds of soil and is preferable to any single variety for hay, silo or green manure. It contains Whippoorwill, Clay and New Era, the varieties most suitable for the purpose. Prices, pkt., 10c; lb., 20c; 5 lbs., 90c, prepaid. Ask for special bushel price.

Vetch

WINTER, or HAIRY VETCH. For drought resistance this is the best of all the Vetches. Hardy, and thrives on sandy soil too poor for clover. It is a legume and gathers nitrogen from the air, making it one of the most useful soiling crops for poor or worn out lands. It stands severe cold, making it a useful cover and green manure crop. Has a tendency to volunteer, hence should be cut or plowed under before seeds mature, if desiring to follow it with a grain crop. The manure value of this crop is estimated at \$26 per acre, as compared with commercial fertilizers. May be sown in the fall for spring pasture or hay, using 40 to 60 pounds of seed if sown alone, but a more common practice is to sow 15 to 25 pounds of vetch and a half bushel of winter rye or wheat, any time from August to October, when it may be pastured the following spring or cut for hay when in bloom. In the Northern States it may be sown in April or early May, either alone as above, for fall pasture, or 15 to 20 pounds of vetch with $\frac{3}{4}$ to 1 bu. of oats, to be plowed under after the oats are harvested. Sown with oats in the spring, it furnishes an abundance of nitrogen, increasing the yield of oats and affording one of the best fertilizers for a fall crop.

Winter Vetch should be inoculated to insure good results. This may be done by using **Edward's Legume Bacteria** at a very small cost. See page 47.

Price, postpaid: Pkt., 10c; lb., 30c. Ask for prices on larger lots.



Vetch.



Dwarf Essex Rape.

Rape

DWARF ESSEX. A succulent, nutritious forage plant, adapted to almost all sections of the country. No other crop will afford as heavy yields or give better returns for the money than this. Excellent for swine or sheep, and as it stands quite severe cold, affords good pasture late in the season when other crops are gone. The Dwarf Essex variety is the only one that is worthy of trial. Ground should be prepared as for turnips. Sow in June or July. If sown with drills, $2\frac{1}{2}$ pounds; or broadcast, 4 pounds of seed should be used per acre. Price, postpaid: Pkt., 5c; lb., 25c. Ask for prices on larger lots.

Soy Beans

Sometimes called *Soja Beans*. Is an erect, rather hairy legume, coming into general use. It is a very valuable crop in many ways. For hay it possesses even greater value than either alfalfa or clover; is an excellent green manure, and makes a splendid ensilage with corn. Is also a very profitable crop grown for seed, as the supply is never equal to the demand. As a soil improver, it is one of the most useful crops. The Soy Bean may be used as a green pasture, which is in its prime during the late summer or early fall, when other pastures are short. For pasture it has been found more satisfactory to mix early and late varieties in equal proportions and plant thickly, by this means a more extended season is obtained. If Soy Beans are inoculated, they draw nitrogen from the air, same as clover, and are thus one of the most valuable fertilizing crops. The crop is rapidly gaining in favor. Do not plant till ground is warm. For hay, use one to two bushels of seed per acre. For pasture about three pecks each early and late varieties. For a seed crop, 15 pounds of small seed, 30 to 40 pounds of large seed. Sow with drill and cover about two inches. For silage, drill 5 to 10 pounds per acre in corn at last cultivation. Special bulletin on Soy Beans furnished on request.

OGEMA. Is one of the earliest and has been found the most satisfactory at the Michigan Agricultural College. This is especially desirable for planting with corn for ensilage. Crops failed.

BLACK BEAUTY. A small seeded, early variety, very satisfactory in silage or mixed with later varieties for pasture or hay. Our seed is Michigan grown. Price, postpaid: Pkt., 10c; lb., 20c. Ask for prices on larger lots.

MAMMOTH YELLOW. A late variety, large yellow seed, large vigorous plant. Desirable for either hay or pasture, though not likely to mature in Michigan except in very favorable seasons. The best to plant with corn for ensilage. Price, postpaid: Pkt., 10c; lb., 20c. Ask for prices on larger lots.

HOLLYBROOK. Small yellow seed, matures in Michigan, plant vigorous, well podded and one of the best late varieties. Our seed is northern grown. Price, postpaid: Pkt., 10c; lb., 20c. Ask for prices on larger lots.



Field of Soy Beans.

DEPARTMENT OF CEREALS

Owing to the world-wide shortage of grain crops the past season and war conditions abroad, grain markets will be subject to many fluctuations, and prices may undergo marked changes, either downward or upward. All prices quoted in this catalog are, therefore, subject to change.

Remember these quotations are given to the printers in October. If markets decline we will gladly give our customers the benefit.

Barley

In the development of Barley, the State of Wisconsin stands foremost, and to Prof. Moore of the University of Wisconsin is due the credit for having brought to bear all the science of botany and agriculture in the prosecution of this important work.

The Pedigree Barley, for which he is largely responsible, and which is being grown very generally in that State under the supervision of State Inspectors, is said to have added not less than \$10,000,000 to the value of the Barley crop in that State the past five years, yet by no means all the Barley grown there is Pedigree, though farmers are beginning to appreciate its value and no doubt in a few years no other kind will be sown. The yield has been increased 15 to 20 bushels per acre, the grain is of higher quality and the straw is stiffer than that of the old kinds.

The stock we offer was grown expressly for seed, has been inspected by the State of Wisconsin, and represents the very highest development in Barley culture. Other seed houses may ask more for their seed, but none of them can furnish anything better.

We have no hesitation in claiming to have this season a stock of seed Barley that is unsurpassed, having made a special effort in this direction. The different varieties we offer are bright, plump, heavy grain, as free from oats or other grain as it is possible to have it.

Michigan Winter Barley

The Most Valuable Grain Introduced in Recent Years.

Winter Barley is grown extensively in the South, but until 1909, no strain had been found suitable for the more northern states. In the fall of 1909, Mr. Dreer, of the Agricultural Department, obtained some seed that he thought desirable for Michigan, which he sent to Prof. Spragg, of the Michigan Agricultural College, who planted it that fall, and by a process of selection of most desirable plants and the elimination of those not deemed suitable, he succeeded in developing a strain that has shown the most remarkable results in this state.

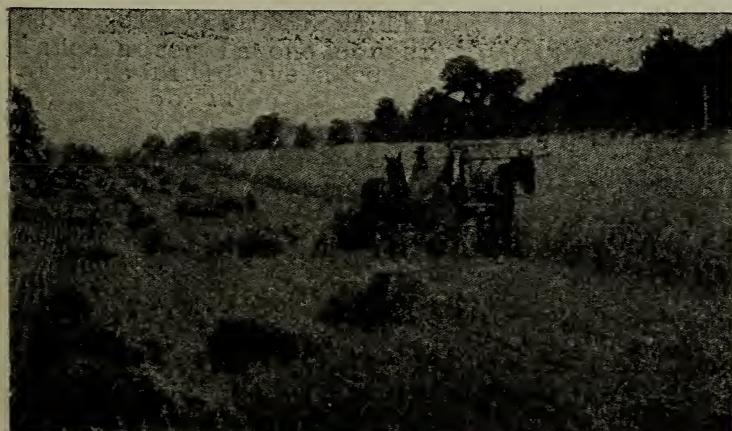
By the fall of 1914 he had sufficient seed to distribute in 60 different parts of the state, where it was planted and the results were so gratifying that Michigan Winter Barley was planted in the fall of 1915 by every farmer who could possibly secure seed. The average yield has been over 55 bu. to the acre, as compared with 35 bu. of spring Barley. It is ready to harvest in June, thus affording the earliest of all grain crops. Fifty-five bushels of barley in pounds is equivalent to 82 bushels of oats, which rarely reach this yield. As a nurse crop it is expected that Winter Barley will prove more useful than either rye or winter wheat. Without doubt it is the most valuable addition to modern grain crops since the introduction of dent corn. Every farmer who can secure the seed should give this remarkable barley a trial.

We are the first seedsmen to offer Michigan Winter Barley and guarantee that what we furnish will well be pure pedigree seed. The supply is limited and we expect our stock will be exhausted early.

Sow same time as winter wheat or rye at the rate of $1\frac{1}{2}$ to 2 bushels per acre. Price, lb., 15c, postpaid. Not prepaid, pk., 75c; bu., \$2.50. Special prices on larger lots.



Champion
Beardless Barley.



Field of Wisconsin Pedigree Barley.

DePUY'S SEEDS ARE FIRST
AID TO GOOD CROPS

BARLEY—Continued.

Wisconsin Pedigree Barley No. 5

This stock was grown by one of the most successful growers in Wisconsin, especially for seed purposes, and having had the benefit of state inspection, we feel warranted in offering the seed for the highest grade that is obtainable. It is a most vigorous grower, with tall, strong straw, which stands up better than any other. Every barley grower should hasten to get a start with this new and coming variety. Prof. Moore, of Wisconsin, the noted barley expert, says: "The Pedigree is a much heavier yielder, much more uniform in kernel, and a great advance in point of color over any existing sort." H. F. Kreuger, of Wisconsin, says: "It has the stiffest, plumpest berry, stands up best and yields more per acre, than any barley I have ever seen." Price, pk., 65c; bu., \$2.35; bags extra. Special price on larger lots.

Oderbrucker Barley

This well known barley developed by Prof. Moore of Wisconsin, is one of the best that is grown. He says: "For stiffness of straw, rust resistance and color is superior to any other sort." Price, pk., 60c; bu., \$2.25; bags extra. Special price on larger lots.

Michigan Bearded Barley

A well-known variety of the six-row type and grown very extensively throughout the state. Our stock has been very carefully selected and re-cleaned, the grain is heavy and of high germination. Price, not prepaid, pk., 60c; bu., \$2.10; bags extra. Special price on larger lots.

Champion Beardless Barley

Is as easily grown as oats, wheat or other small grain. Our seed is of an improved type and as free from bearded as it can be obtained. This variety is especially recommended for its feeding value and for heavy yields. It is the earliest of all barleys, grows a strong, stiff straw and may be sown as early as oats. Price, pk., 75c; bu., \$2.75; bags extra. Special prices on larger lots.

Permanent Pastures and Meadows

Many farmers have certain parts that would be valuable for pasturing if properly seeded, but that now are of little or no value. To obtain the best results, no single grass is suitable under all conditions. If the land is light, hilly or moist, a different mixture is necessary for each location. For every kind and condition of soil there is a number of grasses that are especially suitable. Some thrive best on high land and flourish in dry weather; others do best on moist land. Some va-

Buckwheat

Should be sown about the middle of June, at the rate of from one-half to three-fourths bushel per acre. You will avoid the danger of it spoiling by threshing as soon as dry.

JAPANESE. This is the most productive variety, it frequently giving enormous yields. The berry is larger than the Silverhull, produces a fine flour and is a week earlier than other varieties. Price, pk., 60c; bu., \$2.25; bags extra. Special prices on larger lots.

SILVERHULL. For quality of flour no Buckwheat excels the Silverhull. The berry is not quite as large as the Japanese, is a silver-gray color, shell very thin and grain heavy. The plant remains in bloom longer than any other variety, therefore is valuable for bees. Price, pk., 60c; bu., \$2.25; bags extra. Special prices on larger lots.

Broom Corn

IMPROVED EVERGREEN. In all respects the best variety grown. Is early, produces a superior quality of brush of straight, fine texture and green color. Prices, pk., 5c; lb., 20c, postpaid. Not prepaid, lb., 10c; 10 lbs., 90c.

Flax

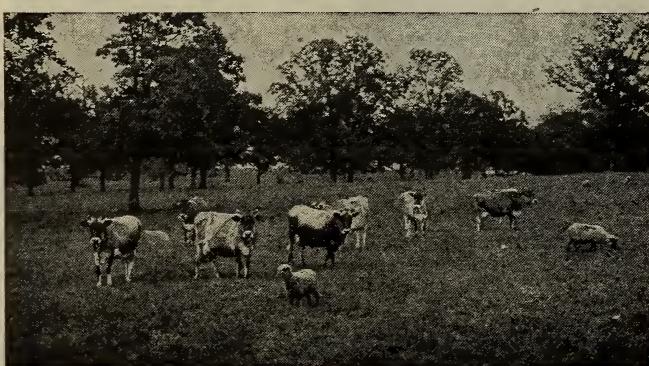
Every farmer could grow a small field of flax at a good profit. The ground seed is valuable for many purposes and every farmer buys more or less. Any surplus seeds always find a ready market at a good price.

Our stock is Michigan grown, the field yielding nearly 25 bushels per acre.

Sow as early in the spring as possible after there is no danger of frost. Cut before quite ripe and, if possible, in clear weather, to avoid rains; let it lay in the swath a few hours, when it should be secured from the weather.

If wanted for seed, sow $\frac{1}{2}$ bushel per acre, if for the fibre, a larger amount of seed should be used.

Price, pk., 5c; lb., 20c, postpaid. Not prepaid, lb., 12c; 15 lbs., \$1.50; 50 lbs., or more, 9c per lb.



A Blue Grass Pasture.

rieties mature early, others late, so that if a proper mixture is used, there will be no time from early spring until late fall that there will not be one or more of them at their best.

By judicious handling many fields that are now unsightly and unprofitable, may be converted into useful and valuable lands, besides making the farm more comfortable and attractive.

We are prepared to furnish any combination, and with a description of location, character of soil and use to which the field is to be put, will be glad to prepare a suitable mixture for the special purpose. In a general way it may be said that for light upland, a combination of Blue Grass, Orchard Grass, Timothy and Sweet Clover may be used to advantage. If hilly and inclined to wash, usually a mixture of Sweet Clover and Hairy Vetch would be best. For heavy clay, a mixture of Blue Grass, Perennial Rye Grass, Red Top and Alsike is recommended, and for low muck lands, Blue Grass, Orchard Grass, Red Top and Alsike is desirable.

Get our samples, compare them with others, order the best one, then see that you get seed equal to the sample.

Field Corn

Prices Subject to Change.

Corn is the great staple crop in all parts of the country, and grows under widely varying conditions of soil and climate. More experimental work has been carried on with corn at the agricultural experiment stations than with any other farm crop, and all important cultural facts have been definitely worked out.

It is unnecessary for us to review the seed corn situation, for every one is familiar with it; that the crop of the entire country was subject to practically the same unfavorable conditions and that in thirty years, has there been so little seed saved, as from the crop of 1917. It is claimed that some of the states in the "corn belt" have an insufficient supply to plant their own acreage for 1918. We believe it a safe assertion that the country never faced a more serious situation. Our growers have given us reasonable assurance of a limited supply of a few varieties, but the expense of handling to insure the greatest possible vitality will be greater than ever before, so at the time of preparing this copy, prices are very indefinite and subject to revision. We quote to the best of our ability, but wish understood that we do not guarantee any of the following quotations.

Prices subject to change, but if any decline, our customers may rest assured they will be given the benefit.

EARLY MICHIGAN DENT. This is a standard variety that has been grown in Michigan a great many years. Stalks medium size and each bears one or two ears of good size, kernels not so deeply indented. Oakland Yellow Dent, bright yellow slightly tinged with red. This is one of the best yielders and the past season matured in fine shape before frosts. Ears not quite as well filled as Oakland Yellow, yet for northern sections and especially for light soils will be found a very desirable variety. Our seed was grown in Central Michigan, therefore adapted to all sections equally as far north. Crops failed.

PRIDE OF THE NORTH. One of the earliest dent corns grown, maturing as far north as St. Paul. In Iowa, Wisconsin, Michigan and New York, it is a 90-day corn. Ears medium size, with 16 to 18 rows and 7 to 8 inches long. Color of grain deep yellow, kernels very deep and small red cob. Growth vigorous, stalk medium size, usually producing two ears. This is a very hardy variety and is said to stand cool weather and to be as well adapted to poor soil as the Flint varieties. It is claimed for this corn that it can be safely replanted in South Dakota, as late as the last of June. Price, large pkt., 10c; pt., 20c; qt., 35c, prepaid. Not prepaid, pk., \$1.50; bu., \$5.50.

EARLY HURON DENT. Is a very handsome early variety, considered a 90-day corn, and under ordinary conditions will mature in the northern corn sections, to be out of frost danger by that time. Ears 7 to 8 inches long, 14 to 16 rows, ears well proportioned, kernel of a distinct lemon color. Grain grows very compact, with no waste space at the surface. This variety is very distinct in every way. Crop failed.

KING OF THE EARLIES. Is a pure yellow grain, ears growing 7 to 8 inches long, with 14 to 18 rows. The surface of the ear is somewhat rough and some of the ears show a distinct hook at the outer extremity of the kernel. This variety is classed among the 90-day corns, but except under the most favorable conditions, is more likely to require 95 days to mature. For Southern Michigan and similar latitudes, this is regarded a very desirable, good yielding, profitable variety. Crop failed.

WISCONSIN No. 7, or SILVER KING. This very valuable white dent corn was originated by the Wisconsin Agricultural College and from there has been introduced into all parts of the Northwest, having been grown successfully in the most extreme northern part of the corn growing sections. Stalks of medium growth, ears uniform in shape and size, maturing perfectly in 90 days. There is an increasing demand for white corn and this without doubt is all its name implies, the King of white varieties. Prices, large pkt., 10c; pt., 20c; qt., 35c, prepaid. Not prepaid, pk., \$1.50; bu., \$5.50.

WHITE CAP YELLOW DENT. An old and well tried early variety, maturing under favorable conditions in 90 to 100 days. Of vigorous growth, it produces an abundance of fodder and affords a good yield of medium size ears, 8 to 10 inches long with 16 to 18 rows. Kernels deep, small red cob. In the ear the grain is almost white, but when shelled is an amber yellow. It is claimed for this variety that it is one of the best in heat and drought resisting qualities. Large pkt., 10c; pt., 20c; qt., 35c, prepaid. Not prepaid, pk., \$1.50; bu., \$5.50.



Early Huron Dent.

FIELD CORN—Continued.

GOLDEN GLOW. One of the best yellow dent corns ever produced. Originated in Wisconsin and it is said that it is the corn that put the state in the corn belt. Ears 7½ to 8½ inches long, with from 16 to 20 rows. The diameter of ears is greater than either of above varieties. Kernel is medium yellow to deep orange in color. Matures in 90 to 100 days. This variety has made some phenomenal yields and is held in very high esteem by those who have been growing it. Crop failed.

Flint Varieties

LONGFELLOW YELLOW. A beautiful eight-rowed yellow flint, ears 10 to 15 inches long. Very prolific and early. One of the most desirable of the flint varieties. Price, large pkt., 10c; pt., 20c; qt., 35c, prepaid. Pk., \$1.75; bu., \$6.00, not prepaid.

SANFORD'S WHITE. An old variety, too well known to need description. One of the earliest maturing corns grown. Price, large pkt., 10c; pt., 20c; qt., 35c, prepaid. Pk., 90c; bu., \$3.00, not prepaid. Special prices on larger lots.

SMUT NOSE FLINT. This variety is very similar to Longfellow, except that the kernels have a reddish tinge. Very early and one of the most prolific of the flint varieties. Price, large pkt., 10c; pt., 20c; qt., 35c, prepaid; pk., \$1.75; bu., \$6.00, not prepaid.

Fodder Varieties

IMPROVED LEAMING. A very valuable yellow dent corn, maturing under favorable conditions in 100 days, but owing to its vigorous growth has been used more extensively as a fodder or ensilage corn than any other yellow variety. Is well adapted to light soils and produces a remarkable amount of fodder. Sure in germinating quality, rich in sugar, vigorous growth. Price, large pkt., 10c; pt., 20c; qt., 35c; prepaid; pk., \$1.25; bu., \$4.50, not prepaid.

ST. CHARLES RED COB. Of most vigorous growth, with long, wide leaves and tall, succulent stalk. It is especially adapted to ensilage purposes. Under very favorable conditions it will mature as far north as the extreme southern part of Michigan and will reach sufficient maturity for ensilage wherever dent corn is grown. No other variety will produce such a wealth of fodder as this. Many successful growers prefer to plant alternate rows of St. Charles and one of the early dent varieties, cutting the two together for ensilage; the one furnishing the succulent and the other the hard part of a most excellent feed. Prices, large pkt., 10c; pt., 20c; qt., 35c, prepaid. Pk., \$1.25; bu., \$4.50, not prepaid.

EVERGREEN SWEET CORN. This affords one of the best early summer green fodders for swine, milch cows and cattle. Is rich in sugar, succulent and relished by all kinds of stock. No other crop will furnish any more feed per acre than sweet corn. Plant the same time as field corn. If drilled, use 75 lbs. or if broadcasted, 150 lbs. per acre. Prices, large pkt., 10c; pt., 25c; qt., 45c, prepaid. Not prepaid, pk., \$2.00; bu., \$7.50.

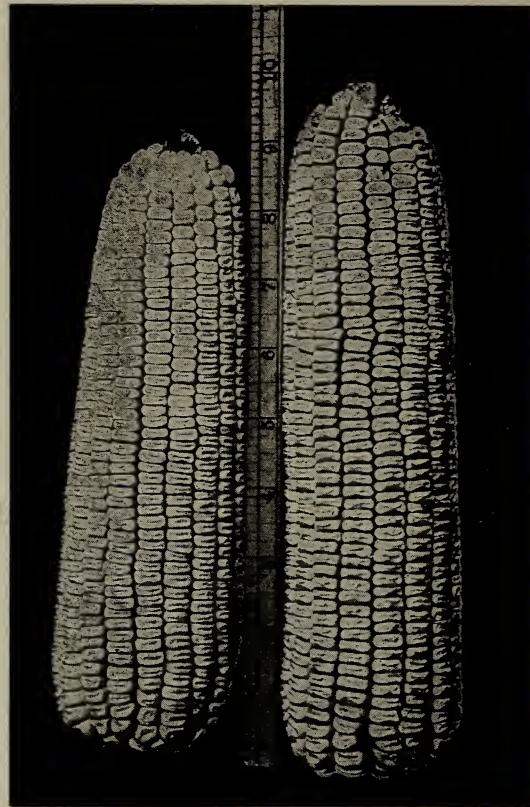
Pop Corn

We are extensive handlers of Pop Corn, and besides offering seed we are in a position to furnish a superior quality for popping at very low prices. Will be pleased to quote on request.

WHITE RICE. The variety that is most extensively grown for commercial purposes. Ears 6 to 7 inches long; kernels white and shape of rice. Pops large and tender. A very profitable crop to grow in a small way. Price, large pkt., 10c; pt., 25c; qt., 45c, postpaid. 10 lbs. (seed for an acre) \$1.75, not prepaid.

QUEEN'S GOLDEN. A favorite variety for the garden and home use; also very popular with street men. Stalks 6 feet high, hardy, matures about the same time as White Rice, and very prolific. Price, pt., 25c; qt., 45c, postpaid. 10 lbs. for an acre, \$1.75, not prepaid.

LITTLE GIANT. Sometimes called Australian Hullless, Dwarf Rice, etc. Ears small, but a number of them on a stalk; one of the most productive varieties grown and in popping qualities excels all others. The demand for this corn is growing constantly and it commands the highest price. See page 3. Price, pt., 30c; qt., 50c, prepaid. 5 lbs. for an acre, \$1.00, not prepaid.



Early Michigan.



Oats

There are many things to be considered with reference to the oats crop for the next few years. Uncertainty regarding the maturity of corn, is making that crop less dependable, though it is to be hoped climatic conditions may be more favorable for it the coming season, but in view of the disastrous results past two or three years, oats promise the surest returns of all the coarse grain crops, and not excepting wheat, it is doubtful if any grain crop is as certain to prove profitable as oats.

The government will force a more extended use of oats either as oat meal or oat flour mixed with other grains, which must have a decided effect on market values the coming year or two. For feeding, next to corn, oats is the most useful of all the grain crops. It would therefore, seem that farmers should plan for as extensive an acreage as possible with assurance that no matter how large the crop may be, it will all be wanted.

We have exercised the greatest care in selecting and cleaning all of our seed stock, which we believe is equal to any that can be obtained and better than much of the stock that is being offered for seed purposes.

We shall be pleased to submit samples and feel sure you will agree with all claims we make.

Aside from getting a better variety than you have been growing, it pays to change seed, the difference between what new seed costs and what you can sell common grain for, is so slight that it represents but a few cents per acre. Prices subject to market changes.

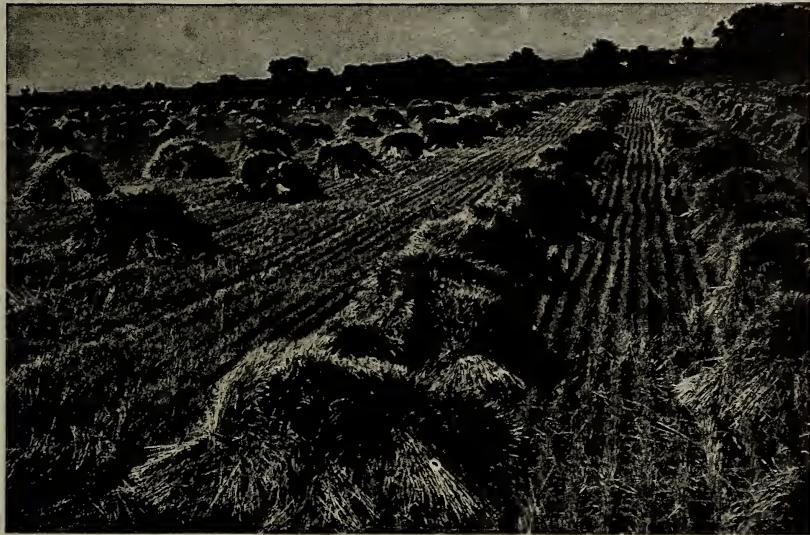
Improved Silver Mine

This oat has a reputation as a heavy and exceedingly reliable producer. It is hardy and very prolific, yielding a beautiful white kernel which is especially desirable for the manufacture of rolled oats and grain for this purpose will be in great demand the coming year, owing to the increased use of oat meal, also the use of oats in war bread.

Heads are large and borne on a stiff, bright straw which is less liable to lodge than many other varieties. Berry is long, plump, heavy and bright, making it a very attractive grain for market purposes and for feeding, no better oat is grown. In fact, this is deservedly one of the most popular and widely cultivated oats yet produced and is, without doubt, adapted to as wide a range of soil and climatic conditions as any oat in cultivation. Lb., 15c, postpaid. Peck, 40c; bu., \$1.25; 5 bu. or more at \$1.20 per bu., not prepaid. Bags extra.

Speltz

Speltz is a grain resembling barley. It was introduced into this country from Southern Europe, where it has been used in place of wheat for flour, also as a stock feed for centuries. It appears to be adapted to all kinds of soil and climate; is more productive than oats; cut at the right time makes an excellent hay; is resistant to cold and drought; neither rusts, blights, nor lodges. In fact is a most useful and profitable crop to grow. The grain is splendid feed for hogs, cattle, horses, and poultry; is rich in protein, making it superior to oats in feeding value, and when growing makes a wonderfully valuable pasture. No other cereal is adapted to a wider range of uses and is deserving of a wider cultivation. Sow 1½ to 2 bushels per acre. Lb., 20c; pk., 75c. Ask for special bushel prices.



Field of Banner Oats after Cutting.

Worthy Oats

Before you decide the seed oat question, you should give the Worthy serious consideration and especially the pedigree seed we are offering. Ask us for a sample and price on the quantity you require. This is the year for oats; they will be wanted. A very slight increase in yield will pay for the seed and the usual increase from this variety will pay for it several times over. Oats being sold by weight, has it ever occurred to you, how much difference it makes, whether your grain weighs 36 lbs. to the bushel or perhaps only 28 lbs.?

This is a development of the Michigan Agricultural College and has proven in a six year test, the most prolific oat grown in Michigan. The straw is of medium growth, heads large and spreading, berry large, plump and heavy. In 1917, this oat out-yielded all other varieties, many pieces going as high as 85 bushels per acre. The average yield through a six-year comparative test at the Michigan Experiment Station, has been 60 bushels. Farmers who have been growing the Worthy, are all very enthusiastic over it and pronounce it the best oat they have ever grown.

Our seed stock is from pedigree seed and of extra quality, having been selected from only the best crops. 1 lb., 20c; pk., 40c; bu., \$1.45; 5 bu. or more, \$1.35 per bu., postpaid.

Banner Oats

This is one of the earliest maturing oats and said to be as nearly rust resisting as any variety grown. Straw stiff, standing up well. Grain heavy and good color. Our seed is from a most reliable source, has been carefully recleaned and is free from any kind of weed seeds. We recommend this variety for all sections of the northern states. Prices, not prepaid: Pk., 40c; bu., \$1.35; 5 bu., \$1.30 per bu. Special prices on larger lots.

Rosen Rye

This wonderful Rye is certain to supplant all other varieties in time, being the heaviest yielder and furnishing a better quality of grain than any other rye ever grown in this country.

To Prof. Spragg of the Michigan Agricultural College is due the credit for developing this most remarkable grain, which we believe is destined to add many thousands of dollars annually to the value of farm crops in Michigan alone.

HISTORY.—A Russian student of the M. A. C. brought with him from Russia a handful of rye, which he gave to Prof. Spragg, who planted it, and from the crop selected a single plant which showed exceptional characteristics. The grain from this plant was saved and planted the next season, and from this crop he again selected plants of the most promising type, repeating this process from year to year until he had sufficient seed to parcel out among a few expert farmers in different sections, at the same time continuing it as a crop at the State Experimental Farm, where for the past three years the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain.

It produces a strong, vigorous straw and the grain is large, plump and heavy. The berry is 50 per cent larger than common rye, color light, with a silvery luster, making it very attractive and just the kind of grain distillers and millers want.

Our seed stock is grown by some of the best farmers in Oakland County, apart from other rye, and threshed in a most careful manner. The seed we used was grown and handled in the same manner, by a very thorough farmer from seed that he obtained direct from Prof. Spragg, so that we can vouch for every pound we offer. It stools very heavy, therefore requires less seed. Sow 3 to 4 pecks up to September 10th. After that date 4 to 5 pecks per acre.

Prices, postpaid: Large pkt., 10c; lb., 20c. Not prepaid, pk., 60c; bu., \$2.25. For larger lots see our special price list.

Rye

COMMON WINTER. Michigan grown winter rye is regarded the most desirable for seed. We furnish many carloads to seedsmen in different parts of the country, it being especially popular with farmers who grow it for silage, pasture, and as a grain crop. Price, lb., 20c, postpaid. For larger quantities see our special price list.

SPRING RYE. Used largely as a cover crop for Vetches, also for turning as a soil improver. It is also a profitable grain crop especially adapted to poor soils and affords quick returns. Price, lb., 20c, postpaid. For larger quantities see our special price list.

Kaffir Corn

A dwarf, leafy variety of sorghum, which is grown for both seed and forage. Should be planted and cultivated same as corn. When harvested for both seed and fodder should be cut in the late dough stage. 5 to 8 lbs. of seed to the acre. Prices, postpaid: Large pkt., 10c; lb., 20c. Not prepaid: 5 to 10 lbs., 10c per lb.; larger lots, 8c per lb.

Sorghum or Sugar Cane

EARLY AMBER CANE. The earliest of all and the richest in saccharine matter, making it the best for syrup, producing 150 to 250 gallons of rich, fine flavored syrup or 4 to 5 tons of forage. There is a growing demand for sorghum syrup at profitable prices, making this a desirable crop to grow. Prices, postpaid: Large pkt., 10c; lb., 25c. For larger quantities see our Special List.

SUGAR CANE FODDER. One of the most useful forage crops. Can be grown anywhere, in wet or dry seasons. Can be fed to all kinds of stock. When about 2½ feet high it may be cut and a second crop will come on. Sow with grain drill with every other hole stopped; cultivate same as corn. Prices, postpaid: Pkt., 10c; lb., 20c. For larger quantities see our Special List.

Red Rock Winter Wheat

Red Rock is a variety of red wheat having exceptional winter hardness, high yielding ability, an extra stiff straw, and those characteristics that produce a bread of unusual quality.

When wheat breeding work began ten years ago, the white wheats were outyielding the reds, while the slightly higher price paid for red wheat did not make up the difference, but since the discovery of Red Rock, white varieties cannot compete from the standpoint of yield, quality, or price.

History. Red Rock wheat originated from an individual kernel planted in the fall of 1908. In 1911 it had been increased enough to enter the variety series of the Michigan Agricultural College. The severe winter of 1911-1912 proved its

superiority. It produced four times as much as the old standard that year, because of its hardness. Hundreds and thousands of pure strains have been tested against Red Rock, but none so far have been found to outyield it.

Our Red Rock seed stock is of pure strain, grown with great care, fields rouged and pains taken in threshing to keep it free from other grain. The demand for this seed will be greater than can be supplied this season and expect the limited supply will be quickly absorbed.

Average seeding, 1½ bushels per acre up to Sept. 20th. Later seeding, 7 to 8 pecks per acre.

Prices, 20c per lb., prepaid. For larger quantities see our Special List.



A Development of Prof. F. A. Spragg, Plant Breeder, Michigan Agricultural College.

Spring Wheat

MARQUIS. Is of Canadian origin and grown more extensively in the Northwest than any other variety. Straw medium length, heads four inches long and beardless. Matures very early. Berry short and round, red color. Price, lb., 20c, prepaid. For larger quantities see our Special List.

BLUE STEM or MINNESOTA NO. 169—Originated at the Minnesota Experimental Station. It is a progeny of Hayne's Pedigree Blue Stem, but much more productive. Is grown extensively in the west and northwest and in quality is without a superior. Price, lb., 20c, prepaid. For larger quantities see our Special Price List.

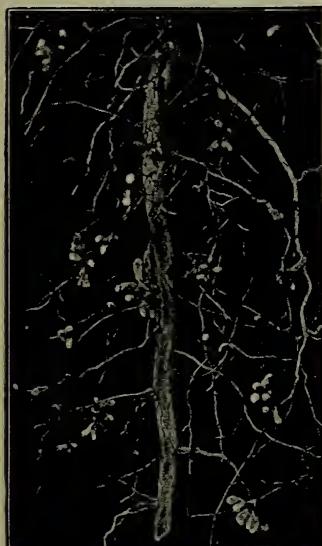
About 16c
per Acre**EDWARDS' LEGUME BACTERIA**About 16c
per Acre

The cost of seed inoculation should no longer prevent the free use of Bacteria Culture on all legume seeds. The benefits derived have been so clearly proven by good farmers in all parts of the country and the practice is now so firmly established, that with the low price we can now offer on the best cultures there is no reason why every farmer should not use them.

Why Better Crops Are Grown by Their Use

The chief value of legumes such as alfalfa, clover, peas, beans, etc., for use either as food or as green manure lies in their high content of nitrogen. With the aid of certain kinds of bacteria, the legumes can get their supply of nitrogen from the air. These bacteria live and grow in the soil, and as the new plants start to grow, the bacteria burrow into the roots, grow there, and produce nodules or tubercles, visible to the eye as little bunches on the smaller roots. During this process the bacteria take nitrogen from the air and give it to the plants. Unless the plants have these legume bacteria growing on their roots, they will not make a successful growth.

On land where it is hard to get a good catch of legumes, or on which a new crop is to be sown, the right kind of bacteria must be supplied by inoculation. One method that has been recommended in times past is to spread over the field to be seeded, soil from a field that has grown the same crop. This method is cumbersome and expensive, and is apt to introduce into the soil seeds of bad weeds, or fungus or bacterial plant diseases, hence it is not a desirable method.



Portion of root of alfalfa plant showing the tubercles or nodules formed by the nitrogen-gathering legume bacteria. (Photograph natural size.)

Seed Inoculation Simple

The best method of inoculation is to treat the seed before it is sown with a pure culture of the right kind of bacteria for that particular crop. By this method the inoculation can be done in a few minutes time, and the bacteria are carried into the soil with the seed in ample numbers to insure inoculation of the roots with consequent increased growth of the crop, and with no risk of introducing seeds of bad weeds or germs of plant or animal diseases.

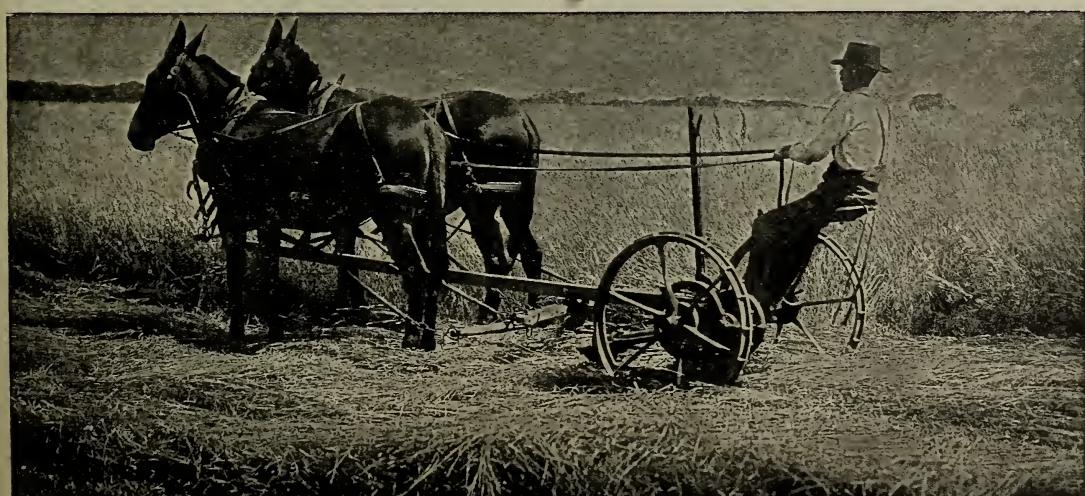
The Cost

Edward's Legume Bacteria cultures are made in two sizes, to inoculate 30 and 60 pounds of seed. To inoculate 30 pounds of seed, 65c; to inoculate 60 pounds of seed, \$1.25, prepaid.

These prices mean a very low cost per acre, the exact amount depending on the amount of seed sown. The cost is less than to pay freight rates on soil from a distance, or even to haul it from a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures.

Cultures are made for legume crops as follows: Alfalfa, Sweet Clover, Burr Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Japan Clover (Lespedeza), Field or Garden Beans, Lima Beans, Broad Beans, Velvet Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cow Peas, Peanuts, Sainfoin, Beggar Weed. Of this list, the same culture can be used for either Alfalfa or Sweet Clover, and likewise the same culture can be used for Red, Alsike, Crimson and Dutch Clovers. All the other crops require a different culture for each as named.

The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express, prepaid, with full directions for use. Terms, cash with order. When you order, be sure to write name and address plainly, and state kind and amount of seed to be inoculated.



INSECTICIDES

"ADHESO" is a combination of 99 per cent pure arsenate of lead and copper hydrate and has the property of sticking to the fruit and foliage even through rains, and is there when most needed, for it is during and just after rains that scab, apple blotch, bitter rot, brown rot, leaf curl and other fungus diseases spread most rapidly and when insects do most harm. It is there to kill codling moth and other chewing insects.

"Adheso" is there to protect your fruit, no matter if it rains again and again.

"Adheso" takes the place of lime and sulphur or Bordeaux mixture.

"Adheso" will not russet or burn the fruit or foliage.

It is easy to handle; being in concentrated form the cost of transportation is less than in bulky mixtures like lime and sulphur and Bordeaux.

Orange Label Adheso 4.2 to 4.3 per cent copper hydrate; 8.9 to 9.3 per cent arsenic oxide. Is used on all kinds of fruit and shade trees. Further descriptive matter on request.

Green Label Adheso 6 to 6.3 per cent copper hydrate; 8 to 9.75 per cent arsenic oxide. Is used on all vegetables, currants, gooseberries, rose bushes, shrubbery and grape vines. Because it sticks, it is better and cheaper for potatoes than Paris Green, not only to kill potato bugs, but to prevent blight and other fungus diseases.

Prices: 5-lb. cans, per lb. 25c; 10-lb. cans, per lb. 24c; 25-lb. cans, per lb. 20c; 50-lb. kegs, per lb. 18c; 100-lb. kegs, per lb. 17c. By freight or express, F. O. B. Pontiac.

ARSENATE OF LEAD. Paste (15% arsenous oxide). We handle the reliable Triangle brand, 99% pure and one of the oldest on the market. It is in paste form, which insures a more complete mixture for a spray than is possible with the dry form. Full descriptive matter on request. 5-lb. cans, per lb. 25c; 10-lb. cans, per lb. 24c; 25-lb. cans, per lb. 20c; 50-lb. kegs, per lb. 19c; 100-lb. kegs, per lb. 18c; 300-lb. kegs, per lb. 17c. By express or freight, F. O. B. Pontiac.

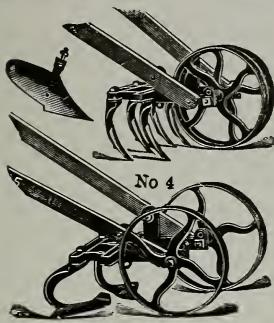
If in the Market for Large Lots of Spray Material. Let Us Figure On Your Requirements.

United States Food Administration License No. G 31815.
United States Grain Administration License No. E 0817.

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Bacon Hand Seed Drills, Hoes and Plows



No 4

Made of Angle Iron, Malleable and Steel, Insuring Great Strength and Durability.

The seed distributor is the most essential feature of a garden drill. In the "Bacon" we offer one that handles all kinds of garden seeds with a degree of perfection that is unequalled, it being especially desirable for carrot, beets, parsnips, onions, wrinkled peas, etc., planting a very even row with light seeding. The feed will also handle phosphates, which can be applied before or after seeding. The Hill Dropper deposits seeds in a compact hill 2 inches long and 9, 12, 18, or 36 inches apart.

The V shaped shoe furrow opener deposits the seed in a narrow line, allowing close cultivation and saving hand weeding.

The Chilled Cultivator Tooth takes a high polish and has great wearing qualities. It permits very close cultivation and leaves the ground level without the need of a rake.

The hoe is an improved pattern. It leaves the ground level without exposing the roots to sun or air.

No. 1 Drill same as No. 10 without the hill dropper. Price, \$6.50.

No. 4, Combined Single and Double Wheel Cultivator, Hoe and Plow. For early cultivation it may be used with two wheels, working both sides of the row at once, and later with one wheel, working between the rows. Price, \$5.00.

No. 6. Expansion Arch Cultivator, Hoe and Plow. Used as a single or double wheel implement. The high arch gives as much clearance as a 30-inch wheel cultivator, runs easier and does closer work. Price, \$5.75.

No. 10. Hill and Drill Seeder

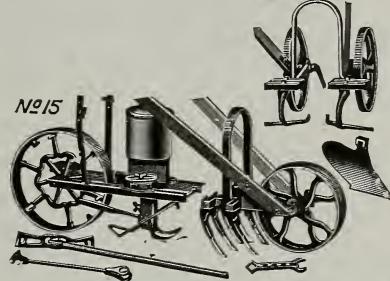
\$ 7.25

No. 12. Hill and Drill Seeder, and No. 4 cultivator combined

9.75

No. 15. Hill and Drill Seeder, and No. 6 cultivator combined

10.50



Price

Peerless Scratch Feed

Careful feeders have demonstrated to their satisfaction that balanced rations are better than single grain rations. That pound for pound they go farther and produce better results. It is therefore only a question of getting a clean, sound mixture of the right ingredients at a reasonable price. That we have this in **Peerless Scratch Feed**, we can convince you and will be glad to mail sample on request; also, if your dealer cannot supply you, we will. Whether a large or small feeder, we know that a fair trial will satisfy you that the same money invested in Peerless Scratch Feed will furnish more feeding value and produce more eggs than any single ration you ever used.

Pulverized Sheep Manure

An ideal fertilizer for Lawns and Gardens. It is free from the objectionable features of barnyard manure which carries many weed seeds, leaves a litter to be raked up and carried away. One bag of pulverized sheep manure equals a load of barnyard manure in fertilizing value.

For lawns apply 75 to 100 pounds to each 1,000 square feet and wet it down with hose. It produces a strong healthy turf of beautiful color and may be used as a top dressing on old lawns or worked into the soil when seeding new lawns.

For gardens it may be drilled in or planted with the seed, or sown broadcast and worked into the soil after plowing. It starts the young plants off strong and vigorous, increases yield and saves weeds.

For House Plants it is the most useful of all fertilizers, a small quantity being worked into the top dirt in pots or mixed with dirt when filling pots.

One lb., 5c; 10 lbs., 35c; 25 lbs., 65c; 100 lbs., \$2.00, not prepaid. Special prices on larger lots.

For Beautiful, Lasting Lawns

Use our **Velvet Brand** Lawn Grass Seed; a combination of the best grasses and white clover that can be obtained. See inside of catalog for full information. Use one pound of seed for 400 square feet of new lawn. Positively no weed seeds in this mixture. It is all seed. No chaff.

Compare Our Prices

Compare our prices on Bacon Drills and Plows with those quoted on similar tools by other dealers.

Victor Chick Feed

The most successful poultrymen have long since discarded the old plan of feeding young chicks meal. Victor Chick Feed is prepared by special machinery that cuts the grain in small, square particles, the grains used being those that contain the necessary elements for producing bone and muscle. Feed dry, the chicks take it a particle at a time, these particles being of such size and shape as to promote digestion. As the cost of feeds depends on the price of grain, we can only quote subject to market changes, but will be pleased to give you the benefit of lowest possible prices on request.

Peerless Scratch Feed, 100 lb. sacks. Ask for prices.
Victor Chick Feed, 100 lb. sacks. Ask for prices.
Victor Developer, for chicks after 6 weeks old.
Crushed Oyster Shells, 100 lb. sack
..... \$0.75
Poultry Charcoal, small sacks.....
..... 25
Poultry Charcoal, 50 lb. sacks.....
..... 1.50
Meat Scraps, 100 lb. sacks, \$5.00, 25 lb. sacks.....
..... 1.30
Darling's Meat Crisps, 75% protein, 3 lb. pkg.....
..... 25
Blachford's Milk Mash for chicks or hens.....
..... 25 lbs. 1.30
Blachford's Egg Mash
..... 25 lbs. 1.25
Bone Meal, 100 lb. sack, \$4.25.....
..... 25 lbs. 1.15
Steel Cut Oats, 100 lb. sacks.....
..... 5.50

F. O. B. PONTIAC. NOT PREPAID.

For
Currant
and
Cabbage
Worms
Aphis
and
Slugs

Hammond's Slug Shot

Has been on the market 35 years and is now used in all parts of the world. It is the only sure preventative and destroyer of potato bugs, currant worms and mildew, cabbage worms, rose aphis, sow bugs, aster beetles, plum curculio, pear slugs, lice on fowls, caterpillars and all plant insects.

Does not injure the plant and no danger from poison. Price, 1 lb. carton, 20c; 5 lb. bag, 35c; 10 lb. bag, 65c. Special prices on large lots.



Two Splendid Oats

IMPROVED SILVER MINE OATS the Past Two Seasons, have proven One of the Most Productive and Best Market Oats Grown. We doubt if, everything considered, there is any other oat so well adapted to such a wide range of conditions as this.

WORTHY OATS—This Splendid Variety originated in Michigan and has shown some Wonderful Yields, many growers considering it superior to all others. See page 45.

Improved Leaming Ensilage Corn

The Surest Cropper, Most Nutritious and one of the Heaviest Tonnage Corns Grown. See page 44.

